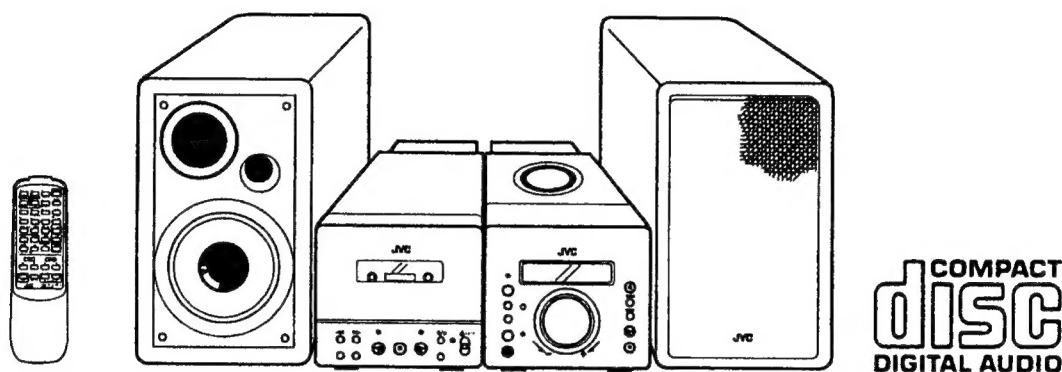


# JVC

## SERVICE MANUAL

### MICRO COMPONENT SYSTEM

## UX-D88GD B/E/EN/G




#### Area Suffix

B.....	U.K.
E.....	Continental Europe
EN .....	North Europe
G .....	Germany

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# 1. Safety Precautions

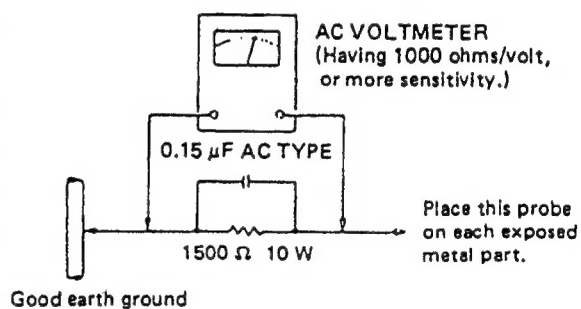
1. The design this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacture's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety – related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of service manual. Electrical components having such features are identified by (  ) on the schematic diagram and parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

After re – assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. using a "Leakage current tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC(r.m.s.)

#### • Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohms 10W resistor paralleled by a 0.15  $\mu$  F AC type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured



## Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.



### CAUTION

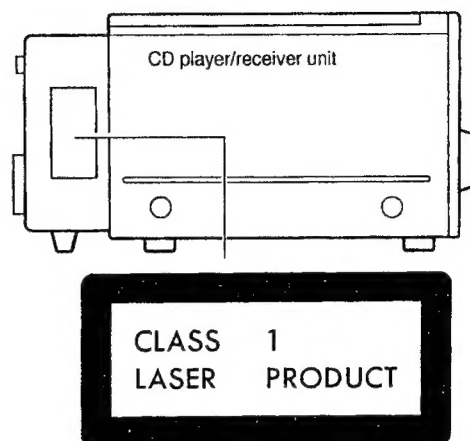
Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

## 2. Safety Precaution about UX– D88

### IMPORTANT FOR LASER PRODUCTS PRECAUTIONS

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.
6. **CAUTION:** The laser is able to function, if safety switches out of function. The laser light is invisible, avoid exposure, do not disassemble the laser unit, but replace the complete unit.

### IDENTIFICATION LABEL AND CERTIFICATION LABEL



Caution:

This production contains a laser component of higher laser class than Class1.

### IMPORTANT (In the United Kingdom) Mains Supply (AC 230 V~, 50 Hz only)

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

#### IMPORTANT

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

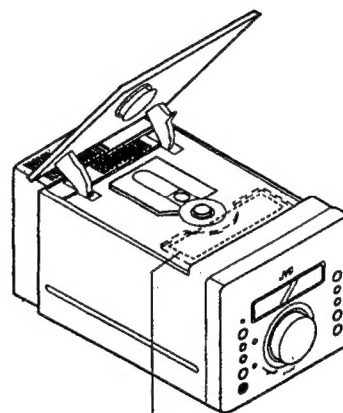


As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

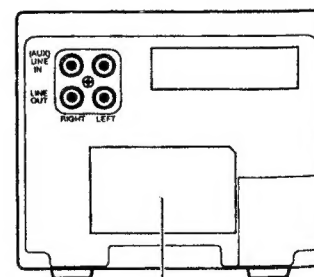
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

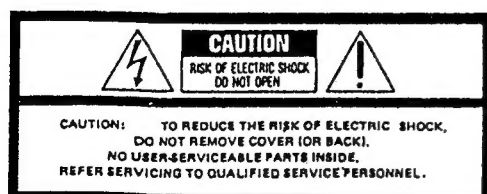
IF IN DOUBT – CONSULT A COMPETENT ELECTRICIAN.



DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. (d)	WARNING: Osynlig laserstråling når denna del är öppnad och spårren är urkopplad. Beträkta ej strålen. (s)	VARO: Avattaessa ja suojalukitus ohitettaessa olet aittauna näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)
--	--	---	--



Name/Rating plate



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### ■ Important management points regarding safety (Item demanding special safety precautions)

#### 1. Power transformer marking : VTP09J2-12B

The torque of the screw driver for the power transformer must be controlled.

#### 2. Concerning the AC socket, the next marking must be confirmed and to avoid print circuit board pattern damage.

The AC socket must not float from print circuit board.

• Marking ..... HSC0528

#### 3. Concerning the primary terminal and the adjacent secondary terminal on the print circuit board to provide proper creeping and spatial distance, solder must not protrude from soldering round.

#### 4. Before installation confirm the fuse capacity indication, (     ) marks on the fuse holder. ( B ONLY)

REF.NO	Capacity and mark	Indication on P.C.board
F1901	T630mA	T630mA
F1902	T8A	T8A

#### 5. Wires must be clamped or secured at the locations shown in the figure so that the wire do not touch to live parts, moving part , hot part, or sharp edges.

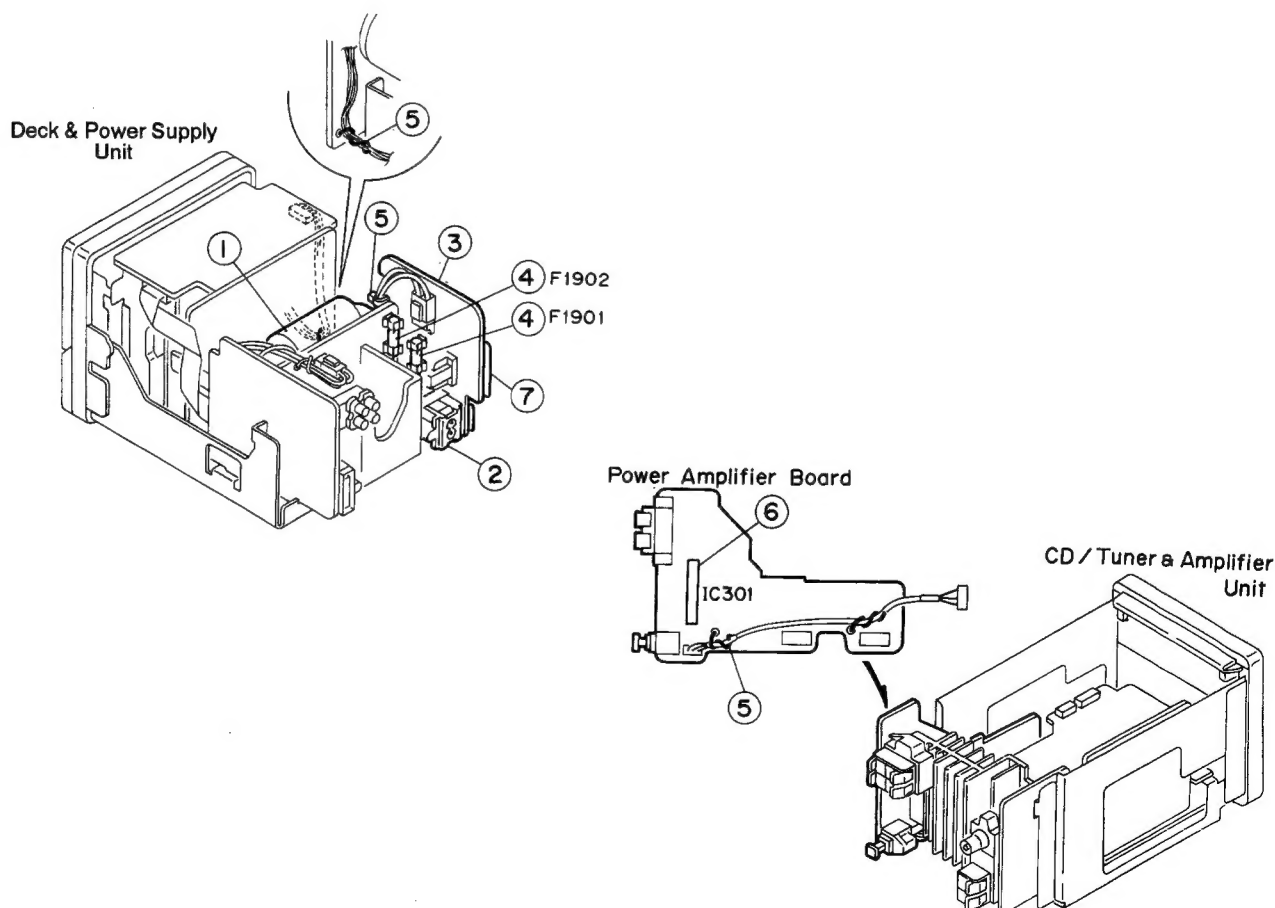
#### 6. Following parts are controlled as the heated parts. confirm that the flammable parts are lifted up .

• IC : (IC301), Transistor : Q7901 , Resistor : R3104, R3204, R3105, R3205, R1909, R355, R356

#### 7. Primary pattern must be covered by barrier.

#### 8. Confirm following EMC (Electromagnetic Compatibility ) control matter.

Control parts , and Control work ( Symbol number ) ..... TU1 , CF1, CF2 (Tuner board)

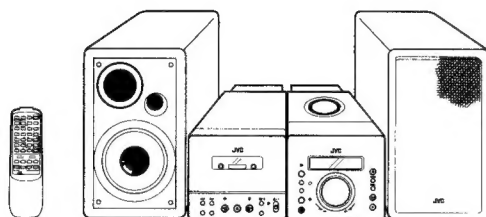


# JVC



## MICRO COMPONENT SYSTEM SISTEMA DE MICROCOMPONENTES SISTEMA A MICROCOMPONENTI

# UX-D88 E



COMPACT  
disc  
DIGITAL AUDIO

## INSTRUCTIONS

ISTRUCCIONES  
MANUALE DI ISTRUZIONI

(No. 10030) 5

### ENGLISH

Thank you for purchasing this JVC product. Please read these instructions carefully before starting operation to be sure to obtain optimum performance and a longer service life from the unit.



### ESPAÑOL

Le agradecemos la adquisición de este producto de JVC. Por favor lea detenidamente las instrucciones antes de comenzar la operación para obtener de esta unidad un rendimiento óptimo y una vida de servicio más larga.

### ITALIANO

Grazie per avere acquistato questo prodotto JVC. Si prega di leggere queste istruzioni con attenzione prima dell'uso per essere certi di ottenere prestazioni ottimali ed una lunga durata dell'unità.

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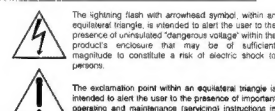
### WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



### ADVERTENCIA:

PARA REDUCIR EL RIESGO DE INCENDIO O DE CHOQUES ELECTRICOS, NO EXPONGA ESTE APARATO A LA LLUVIA O A LA HUMEDAD.



### AVVERTENZA:

NON ESPORRE L'APPARECCHIO A PIOGGIA O UMIDITA' ONDE RIDURRE I RISCHI DI FIAMME O SCOSSE ELETTRICHE.

### Per l'Italia:

"Si dichiara che il questo prodotto di marca JVC è conforme alle prescrizioni del Decreto Ministeriale n.548 del 28/08/95 pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana n.301 del 28/12/95."

### IMPORTANT FOR LASER PRODUCTS

#### PRECAUTIONS

1. CLASS 1 LASER PRODUCT
2. DANGER: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. CAUTION: Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. CAUTION: The CD player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder or CD tray is open. It is dangerous to defeat the safety switches.
5. CAUTION: Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.

### IMPORTANTE PARA PRODUCTOS LASER

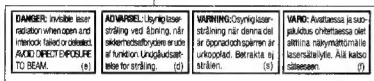
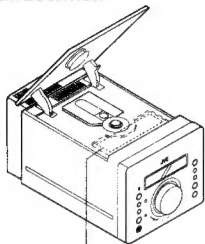
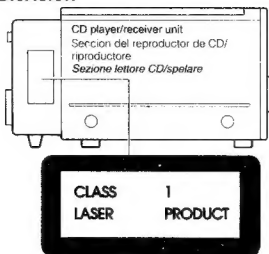
#### PRECAUCIONES

1. PRODUCTO LASER CLASE 1
2. PELIGRO: Radiación láser invisible cuando se abre, falla o se desactiva el encerramiento. Evite la exposición directa al rayo.
3. PRECAUCIÓN: No abra la cubierta trasera. Dentro de la unidad no hay componentes que el usuario pueda reparar; deje toda reparación al personal de servicio cualificado.
4. PRECAUCIÓN: El reproductor de CD utiliza radiación láser invisible y está equipado con interruptores de seguridad que evitan la emisión de radiación cuando se abre el portadisco de CD o compartimento del CD. Es peligroso desactivar los interruptores de seguridad.
5. PRECAUCIÓN: La utilización de los controles de ajuste y de procedimientos que no estén especificados aquí, puede resultar en exposición a radiación peligrosa.

### IMPORTANTI PRECAUZIONI PER PRODOTTI LASER

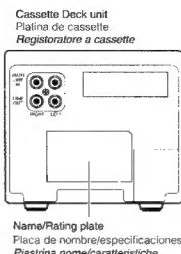
#### PRECAUZIONI

1. PRODOTTO LASER DI CLASSE 1
2. PERICOLO: Quando l'apparecchio è aperto ed i dispositivi di sicurezza non funzionano o sono stati disattivati, vengono prodotte invisibili radiazioni laser. Evitare l'esposizione diretta al raggio.
3. ATTENZIONE: Non aprire la copertura posteriore. All'interno dell'unità non vi sono parti che possono interessare l'utente; fare eseguire qualsiasi intervento a personale di assistenza qualificato.
4. ATTENZIONE: Il lettore CD utilizza radiazioni laser invisibili ed è fornito di interruttori di sicurezza per evitare l'emissione di tali radiazioni quando il piatto del CD è aperto. Non escludere tali interruttori di sicurezza in quanto ciò è pericoloso.
5. ATTENZIONE: L'uso di comandi e procedure diversi da quanto specificato possono risultare nell'esposizione a radiazioni pericolose.

REPRODUCTION OF LABELS  
AND THEIR LOCATIONREPRODUCCION DE ETIQUETAS  
Y SU UBICACION

Caution:  
This production contains a laser component of higher laser class than Class 1.  
Attenzione:  
Questo prodotto contiene un laser di classe superiore alla 1.  
Precaución:  
Este producto contiene un componente láser de clase superior a la Clase 1.

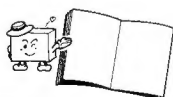
## ETICHETTE E LORO POSIZIONE



## FEATURES

- CD-size micro component system consisting of 4 units
- Active Hyper-Bass PRO circuit for low-frequency sound reproduction
- Dynamic axial-drive woofer
- One-touch operation (COMPU PLAY)
- 36-key remote control unit operates all CD, cassette deck and tuner functions
- Multi-function CD player
- Programmed play of up to 20 tracks
- Repeat Play
- Random Play
- U-Turn auto-reverse full-logic mechanism with Dolby® B NR
- Auto tape select mechanism
- Metal (type IV) and CrO<sub>2</sub> (type II) tape can be played back for superior tone quality
- CrO<sub>2</sub> (type II) tape recording capability
- 2-band digital synthesizer tuner with 45-station (30 FM and 15 AM (MW/LW)) preset capability
- Seek/manual tuning
- Auto preset tuning
- Timer/Clock function
- Timer on/off with preset volume function
- Sleep timer can be set for up to 120 minutes
- Optical digital output

\* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.



## CARACTERISTICAS

- Sistema de microcomponentes del tamaño de un CD, consistente de 4 unidades
- Circuito Active Hyper-Bass PRO para reproducción sonidos de baja frecuencia
- Altavoz de graves con excitador axial dinámico
- Operación de un solo toque (COMPU PLAY)
- Unidad de control remoto con 36 teclas para operación del CD, platina de cassette y funciones del sintonizador
- Reproductor de CD con funciones múltiples
- Reproducción programada hasta 20 pistas
- Repetición de reproducción
- Reproducción aleatoria
- Mecanismo de lógica completa inversión automática en U con Dolby® B NR
- Mecanismo de selección automática de cinta
- Para obtener una calidad de tono superior es posible utilizar cintas de metal (tipo IV) y de CrO<sub>2</sub> (tipo II)
- Capacidad para grabación de cintas de CrO<sub>2</sub> (tipo II)
- Búsqueda de músicas hacia adelante o hacia atrás
- Sintonizador sintetizador digital de 2 bandas con capacidad para preintonización de 45 estaciones (30 de FM y 15 de AM (OM/LW))
- Sintonización búsqueda manual
- Sintonización programada automática
- Función de temporizador/reloj
- Activación/desactivación del temporizador con función de volumen preajustado
- El temporizador despertador puede ser programado hasta un máximo de 120 minutos
- Salida digital óptica

\* Reductor de ruido Dolby fabricado bajo licencia de Dolby Laboratories Licensing Corporation. "Dolby" y el símbolo de la doble D son marcas de Dolby Laboratories Licensing Corporation.

## CARATTERISTICHE

- Sistema a microcomponenti formato CD composto da 4 unità
- Circuito Active Hyper-Bass PRO di nuova concezione per la riproduzione delle basse frequenze
- Woofer Dynamic Axial-Drive
- Funzionamento ad un tocco (COMPU PLAY)
- L'unità di telecomando da 36 tasti controlla tutte le funzioni del lettore CD, del registratore a cassette e del sintonizzatore
- Lettore CD multifunzione
- Riproduzione programmata di fino a 20 brani
- Riproduzione ripetuta
- Riproduzione casuale
- Meccanismo U-Turn di inversione automatica completamente logico con sistema antirumore Dolby® B NR
- Meccanismo per la selezione automatica del tipo di nastro
- Possono essere riprodotti nastri Metal (tipo IV) e CrO<sub>2</sub> (tipo II) che forniscono una migliore qualità musicale
- Capacità di registrazione su nastri CrO<sub>2</sub> (tipo II)
- Funzione di scansione dei brani in ambedue le direzioni
- Sintonizzatore a sintonizzazione digitale a 2 bande con capacità di preselezione di fino a 45 stazioni (30 FM e 15 AM (MW/LW))
- Sintonizzazione con ricerca manuale
- Sintonizzazione con preselezione automatica
- Funzione timer/orologio
- Funzione di attivazione e disattivazione via timer con preimpostazione del volume
- Il timer per lo spegnimento automatico può essere impostato per fino a 120 minuti
- Uscita digitale ottica

\* Sistema di riduzione del rumore fabbricato su licenza della Dolby Laboratories Licensing Corporation. La parola "Dolby" ed il simbolo della doppia D sono marchi registrati della Dolby Laboratories Licensing Corporation.

2. Do not handle the power cord with wet hands.
3. When unplugging from the wall outlet, always grasp and pull the plug, not the power cord.
4. Consult your nearest dealer when damage, disconnection, or contact failure affects the cord.
5. Do not bend the cord severely, or pull or twist it.
6. Do not modify the power cord in any manner.
7. To avoid accidents, do not remove screws to disassemble the unit and do not touch anything inside the unit.
8. Do not insert any metallic objects into the unit.
9. Unplug the power cord when there is a possibility of lightning.
10. If water gets inside the unit, unplug the power cord from the outlet and consult your dealer.
11. Do not block the unit's ventilation holes that allow heat to escape.
12. Do not install the unit in a badly ventilated place.
13. Since this unit uses a motor-driven CD holder or CD tray, make sure that your hand or other object does not obstruct holder or tray movement.

2. No manipule el cordón eléctrico con las manos mojadas.
3. Cuando lo desenchufa del tomacorriente de la pared, sujételo siempre por el enchufe, nunca por el cordón.
4. En caso de que el cordón sea afectado por daños, desconexión, o falso contacto, consulte a su agente más cercano.
5. No doble en ángulo agudo el cordón, no jale del mismo ni lo retuerza.
6. No modifique el cordón eléctrico de ninguna manera.
7. Para evitar accidentes, no extraiga los tornillos para desarmar la unidad y no toque nada dentro de la misma.
8. No inserte ningún objeto metálico dentro de la unidad.
9. Desenchufe el cordón eléctrico cuando haya posibilidad de calda de rayos.
10. Si se introduce agua dentro de la unidad, desenchufe el cordón eléctrico del tomacorriente y consulte a su agente.
11. No bloquee los orificios de ventilación de la unidad que permiten el escape de calor.
12. Como esta unidad utiliza un portadisco o una bandeja de CD motorizado, asegúrese de que su mano u otro objeto no obstruya el movimiento del mismo.

2. Non maneggiare il cavo di alimentazione con le mani bagnate.
3. Per scollegarsi dalla presa di rete, afferrare sempre la spina e non il cavo dell'alimentazione.
4. Consultare il rivenditore più vicino quando il cavo è danneggiato, scollegato o con contatti scadenti.
5. Non piegare eccessivamente il cavo, non tirarlo e non torcerlo.
6. Non modificare il cavo di alimentazione in alcun modo.
7. Per evitare incidenti, non rimuovere viti per smontare l'unità e non toccare alcun componente interno.
8. Non inserire alcun oggetto metallico nell'unità.
9. Scollegare il cavo di alimentazione durante temporali con fulmini.
10. Se dell'acqua dovesse penetrare all'interno dell'unità, scollegare il cavo dell'alimentazione dalla presa di rete e consultare il proprio rivenditore.
11. Non bloccare i fori per la ventilazione dell'unità che permettono la dissipazione del calore.
12. Come questa unità utilizza un piatto o caricatore di CD motorizzato, assicurarsi di non ostruire il movimento con una mano o un oggetto.

## ON/OFF button

When the power cord is connected to a household AC outlet, the power indicator lights in red indicating the STANDBY mode. When the ON/OFF button is pressed, the power indicator goes out and the display window lights.

When this unit is plugged into an AC outlet, it consumes a small current to operate the remote control and timer, or to back up the memory of the microprocessor, even when the ON/OFF button is set to STANDBY.

## Botón ON/OFF

Cuando se conecta el cordón eléctrico al tomacorriente de CA, el indicador de alimentación se enciende en rojo indicando el modo STANDBY. Cuando presiona el botón ON/OFF, el indicador de alimentación se apaga y se enciende la ventanilla de indicación.

Esta unidad consume una pequeña corriente cuando se la conecta a un tomacorriente de CA, para hacer funcionar el controlador remoto y el temporizador, o para apoyo de la memoria del microprocesador, aún cuando se haya colocado el botón ON/OFF en STANDBY.

## Interruttore di accensione (ON/OFF)

Cuando el cavo de alimentación es conectado con una presa di rete CA, l'indicatore dell'alimentazione si illumina in rosso per indicare il modo STANDBY. Quando il tasto ON/OFF viene premuto, l'indicatore dell'alimentazione si spegne ed il display si illumina.

Quando questa unità è collegata ad una presa di corrente CA, essa consuma una piccola quantità di corrente per il funzionamento del telecomando e del timer o per il mantenimento della memoria del microprocessore anche quando il tasto ON/OFF è impostato su STANDBY.

## Caution:

## Proper Ventilation

To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

1. Front: No obstructions and open spacing.
2. Sides/Top/Back: No obstructions should be placed in the areas shown by the dimensions below.
3. Bottom: Place on a level surface. Maintain an adequate air path for ventilation by placing on a table with a height of 10 cm or more.

## Precaución:

## Ventilación correcta

Para evitar el riesgo de descargas eléctricas e incendio y prevenir posibles daños, instale el equipo en un lugar que cumpla los siguientes requisitos:

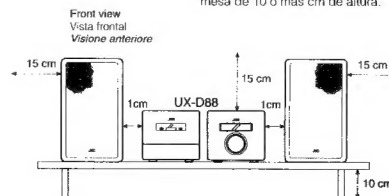
1. Parte frontal: Sin obstrucciones, espacio abierto.
2. Lados/Parte superior/Parte posterior: No debe haber ninguna obstrucción en las áreas mostradas por las dimensiones de la siguiente figura.
3. Parte inferior: Sitúe el equipo sobre una superficie nivelada. Mantenga un espacio adecuado para permitir el paso del aire y una correcta ventilación, situando el equipo sobre una mesa de 10 o más cm de altura.

## Attenzione:

## Ventilazione corretta

Per evitare rischi di scosse elettriche e fiamme, installare l'apparecchio come indicato di seguito:

1. Lato anteriore: Nessun ostacolo e spazio aperto.
2. Lati sinistro e destro/superiore/posteriore: Nessun ostacolo deve essere posto nell'area indicata dalle dimensioni riportate in basso.
3. Fondo: Posizionare su di una superficie a livello. Mantenere un percorso adeguato per la ventilazione utilizzando una tavola con un'altezza di 10 cm o più.



## SAFETY PRECAUTIONS

## Prevention of Electric Shocks, Fire Hazards and Damage

1. Even when the ON/OFF button is set to STANDBY, a very small current will flow. To save power and for safety when not using the unit for an extended period of time, disconnect the power cord from the household AC outlet.

## PRECAUCIONES DE SEGURIDAD

## Prevención de choques eléctricos, peligro de incendio y daños

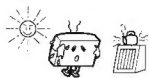
1. Aunque el botón de alimentación ON/OFF esté colocado en espera STANDBY, fluye una pequeña corriente eléctrica. Para ahorrar energía y por seguridad cuando no utiliza esta unidad durante un largo período, desconecte el cordón eléctrico del tomacorriente de CA.

## PRECAUZIONI PER LA SICUREZZA

## Prevenzione di scosse elettriche, fiamme e danni

1. Anche quando l'interruttore ON/OFF si trova sulla posizione STANDBY, una piccola quantità di corrente continua a fluire. Per risparmiare energia e per ragioni di sicurezza, scollegare il cavo dell'alimentazione dalla presa di corrente CA quando si prevede di non utilizzare l'unità per un periodo prolungato.

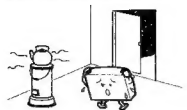
## HANDLING PRECAUTIONS



Do not use this unit in direct sunlight where it would be exposed to high temperatures above 40°C (104°F).

- Avoid installing in the following places**
  - Where it could be subject to vibrations.
  - Where it is excessively humid, such as in a bathroom.
  - Where it could be magnetized by a magnet or speaker.
- Pay attention to dust**  
Be sure to close the CD holder or CD tray so that dust does not collect on the lens.
- Condensation**  
In the following cases, condensation may occur in the unit, in which case the unit may not operate correctly.
  - In a room where a heater has just been switched on.
  - In a place where there is smoke or high humidity.
  - When the unit is moved directly from a cold to a warm room.
 In these cases, set the **STANDBY** button to **STANDBY** and wait 1 or 2 hours before use.
- Volume setting**  
CDs produce very little noise compared with analog sources. If the volume level is adjusted for these sources, the speakers may be damaged by the sudden increase of output level. Therefore, lower the volume before operation and adjust it as required during play.
- Safety mechanism**  
This unit incorporates a safety interlock mechanism which switches the laser beam on and off, so that when the CD holder or CD tray is open, the laser beam stops automatically.
- Do not place cassette tapes, etc. near the speakers**  
Since there are magnets in the speakers, do not place tapes or magnetic cards on them as recorded data could be erased.
- Keep this unit away from your TV**  
When this unit is used near a TV, the TV picture could be distorted. If this happens, move this unit away from the TV. If this does not correct the situation, avoid using this unit when the TV is turned on.
- Cleaning the cabinet**  
If the cabinet gets dirty, wipe it with a soft, dry cloth. Never use benzine or thinner as these could damage the surface finish.
- When listening with headphones**
  - Do not listen at high volumes as this could damage your hearing.

## PRECAUCIONES DE MANIPULACION



No utilice esta unidad bajo la luz directa del sol donde podría quedar expuesta a temperaturas superiores a 40°C.

- Evite instalarla en los siguientes lugares**
  - Donde pueda ser sujeta a vibraciones.
  - Donde haya humedad excesiva, tal como en un cuarto de baño.
  - Donde pueda ser magnetizada por un imán o altavoz.
- Preste atención al polvo**  
Asegúrese de cerrar el portadisco o compartimento de CD para que el polvo no se deposite sobre la lente. No toque la lente.
- Condensación**  
En los siguientes casos, puede producirse condensación dentro de la unidad y en consecuencia la unidad no funcionará correctamente.
  - En una sala donde haya un calentador encendido.
  - En un lugar donde haya humo o gran humedad.
  - Cuando se traslada rápidamente la unidad de una sala fría a una templada.
 En estos casos, coloque el botón **STANDBY** (conectado) y espere 1 o 2 horas antes de utilizarla.
- Ajuste del volumen**  
Los productos de CD producen muy poco ruido comparados con las fuentes analógicas. Si ajusta el nivel de volumen para estas fuentes, es posible que los altavoces sean dañados por el incremento brusco del nivel de salida. Por ello, reduzca el volumen antes de la operación y ajústelo como desee durante la reproducción.
- Mecanismo de seguridad**  
Esta unidad posee un mecanismo de enclavamiento de seguridad que apaga y enciende el rayo láser de tal manera que cuando se abre el portadisco o compartimento de CD, el rayo láser se apaga automáticamente.
- No coloque cassettes de cinta, etc., próximos a los altavoces**  
Como hay imanes en los altavoces, no coloque cintas o tarjetas magnéticas sobre los mismos, ya que los datos grabados pueden ser borrados.
- Mantenga esta unidad lejos de su TV**  
Cuando se usa esta unidad próxima a un TV, la imagen de éste puede ser distorsionada. Si ello ocurre, mueva esta unidad lejos del TV. Si esto no corrige el problema, evite usar esta unidad cuando el TV está encendido.
- Limpeza del gabinete**  
Si el gabinete se ensucia límpielo con un paño suave y seco. Nunca utilice bencina o solventes ya que estos pueden dañar la terminación de la superficie.
- Cuando escuche con auriculares**
  - No escuche con el volumen muy alto porque podrían dañarse sus oídos.

## PRECAUZIONI PER L'USO



Non utilizzare questa unità in luoghi esposti alla luce solare diretta dove la temperatura può superare i 40°C.

- Evitare l'installazione nei luoghi seguenti**
  - In luoghi dove l'unità può essere soggetta a vibrazioni.
  - In luoghi eccessivamente umidi come una stanza da bagno.
  - In luoghi dove l'unità può essere magnetizzata da un magnete o da un diffusore.
- Fare attenzione alla polvere**  
Accertarsi di chiudere il piatto o caricatore di CD in modo che la polvere non si raccolga sulla lente del pickup. Non toccare la lente del pickup.
- Condensa**  
Nei casi seguenti della condensa si potrebbe formare nell'unità impedendo il funzionamento corretto dell'unità stessa.
  - In una stanza in cui il riscaldamento è appena stato acceso.
  - In un luogo fumoso o con elevata umidità.
  - Cuando l'unità viene spostata direttamente da una stanza fredda ad una calda.
 In questi casi, portare il tasto **STANDBY** ed attendere 1 o 2 ore prima di utilizzare l'unità.
- Impostazione del volume**  
I CD producono un rumore estremamente basso se confrontati con fonti analogiche. Se il livello del volume fosse impostato per tali fonti, i diffusori potrebbero venire danneggiati dall'improvviso aumento del livello in uscita. Abbassare perciò il volume prima dell'uso e regolarlo quindi durante la riproduzione.
- Mecanismo di sicurezza**  
Questa unità incorpora un meccanismo di sicurezza che attiva o disattiva il raggio laser in modo che quando il piatto del CD è aperto il raggio laser viene disattivato automaticamente.
- Non posare nastri a cassetta, ecc., in prossimità dei diffusori**  
Dato che i diffusori incorporano dei magneti, non posare nastri registrati o schede magnetiche su di essi in quanto i materiali registrati potrebbero venire cancellati.
- Tenere l'unità lontana dal televisore**  
Quando questa unità viene utilizzata in prossimità di un televisore, l'immagine TV potrebbe venire distorta. Se ciò dovesse accadere, allontanare l'unità dal televisore. Se ciò non fosse sufficiente ad eliminare le interferenze, evitare di utilizzare questa unità quando il televisore è acceso.
- Pulizia dell'esterno dell'unità**  
Se l'esterno dell'unità fosse sporco, strofinare con un panno morbido ed asciutto. Non usare mai benzina o diluente in quanto essi possono danneggiare la finitura delle superfici.
- Ascolto con le cuffie**
  - Non ascoltare ad alto il volume in modo da danneggiare le orecchie.

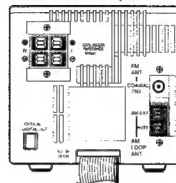
## CONNECTIONS

- Do not switch the power on until all connections are completed.

### Antenna connection and adjustment

- AM (MW/LW) loop antenna adjustment

CD player/receiver unit  
Sección del reproductor de CD/  
riproduttore  
Sezione lettore CD/spelare

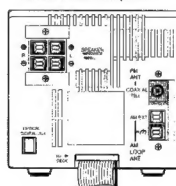


Insert in the direction of the arrow.  
Inserte en la dirección de la flecha.  
Inserire nella direzione della freccia.

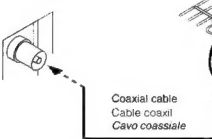
- Keep the loop antenna away from the unit and install it so that the best reception is obtained. (Do not leave the antenna wire in a bundle.)
- Conservar la antena de cuadro separada de la unidad e instalela de tal manera que se obtenga la mejor recepción. (No deje arrollado el cable de la antena.)
- Tenere l'antenna ad anello lontana dall'unità ed installarla in modo da ottenere la migliore ricezione possibile. (Non lasciare avvolto il filo dell'antenna.)

### FM antenna connections and adjustments

CD player/receiver unit  
Sección del reproductor de CD/  
riproduttore  
Sezione lettore CD/spelare



FM feeder antenna (provided)  
Antena de alimentación FM (suministrada)  
Antenna FM a plettina (in dotazione)



FM outdoor antenna (option)  
Antena exterior de FM (opcional)  
Antenna FM esterna (opzionale)

- Use an outdoor antenna when stable reception cannot be obtained with the provided antenna.
- Cuando no sea posible obtener una recepción estable con la antena suministrada, utilice una antena exterior.
- Utilizzare un'antenna esterna quando non è possibile ottenere una ricezione stabile per mezzo dell'antenna in dotazione.

### Notes:

- Do not place the loop antenna on a metal desk or near a TV or personal computer.
- Installing an outdoor antenna requires expertise; we recommend that you consult an audio dealer.
- Install the antenna cord away from the power and speaker cords as these could generate noise. Do not install the loop antenna so that it touches the rear of the unit.

### Notes:

- No coloque la antena de cuadro sobre un escritorio de metal o cerca de un TV o computador personal.
- La instalación de una antena externa requiere experiencia; recomendamos que consulte con su agente de audio.
- Coloque el cable de la antena lejos de los cordones de alimentación y de los altavoces ya que estos pueden generar interferencia. Cuando instale la antena de cuadro no permita que entre en contacto con la parte trasera de la unidad.

## COLLEGAMENTI

- Non attivare l'alimentazione hasta haber completado todas las conexiones.

### Collegamento e regolazione antenna

- Regolazione antenna AM ad anello (MW/LW)

AM (MW/LW) loop antenna  
Antena de cuadro de AM (OM/OL)  
Antenna AM (MW/LW) ad anello



### Raccordamenti e réglages de l'antenne FM

- Conexiones y ajuste de la antena de FM

CD player/receiver unit  
Sección del reproductor de CD/  
riproduttore  
Sezione lettore CD/spelare

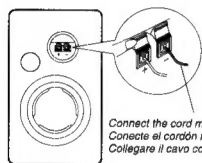
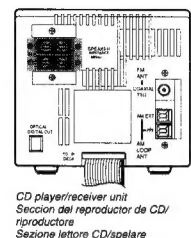


FM outdoor antenna (option)  
Antena exterior de FM (opcional)  
Antenna FM esterna (opzionale)

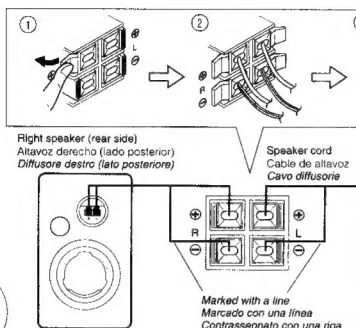
### Note:

- Non installare l'antenna ad anello su di un tavolo metallico oppure nelle vicinanze di un televisore o di un personal computer.
- L'installazione di un'antenna esterna richiede esperienza; si raccomanda di consultare un rivenditore di apparecchiature audio.
- Installare il cavo dell'antenna lontano dai cavi di alimentazione e dai cavi dei diffusori in quanto questi potrebbero generare disturbi. Installare l'antenna ad anello in modo che non tocchi il retro dell'unità.

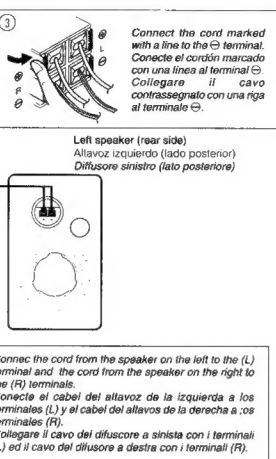
## Speaker cord connection



## Conexión de los cordones de los altavoces



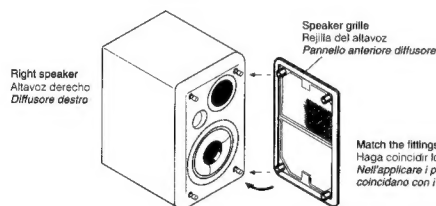
## Collegamento cavi diffusori



## • Attaching the speaker grille

## • Colocación de la rejilla del altavoz

## • Applicazione del pannello anteriore al diffusore



- The speaker grilles can be removed.
- When removing:  
1. Insert your fingers at the top and pull towards you.  
2. Also pull the bottom towards you.

- Las rejillas de los altavoces pueden ser extraídas.
- Cuando extrae:  
1. Inserte los dedos en la parte superior y tire hacia usted.  
2. También tire el fondo hacia usted.

- Il pannello anteriore dei diffusori può venire tolto.
- Per toglierlo:  
1. Inserire le dita in alto e tirare verso di sé.  
2. Tirare anche il fondo verso di sé.

## Notes:

- The polarity of the two connected speakers will be the same if the speaker cords marked with a white line are connected to the ⊕ terminals. If the speakers are connected with polarities reversed, stereo effect and tone will be degraded.
- The speakers of this unit are not magnetically shielded. When they are placed directly on or adjacent to a TV, the TV's picture could be distorted. Install the speakers more than 20 cm away from your TV.
- If the speakers are to be placed away from the main unit, purchase optional speaker cords from an audio store.
- When connecting the speaker cord make sure that the wire core, not the insulating cover, is connected to the speaker terminal. Otherwise, sound cannot be heard.

## Notes:

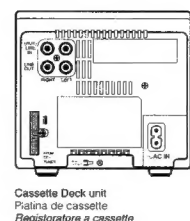
- La polaridad de los dos altavoces conectados es la misma si los cables para altavoz marcados con la línea blanca son conectados a los terminales ⊕. Si se conectan los altavoces con las polaridades invertidas, se degradará el efecto estéreo y el tono.
- Los altavoces de esta unidad no están blindados magnéticamente. Cuando se los coloca directamente o adyacentes a un TV, la imagen de éste puede ser distorsionada. Instale los altavoces a más de 20 cm. de distancia de su TV.
- Si los altavoces van a ser colocados lejos de la unidad principal, adquiera los cordones opcionales para altavoces en una tienda de audio.
- Cuando conecta el cordón del altavoz, asegúrese de que el núcleo del cable, y no la cubierta aislante, quede conectado al terminal del altavoz, de lo contrario no se escuchará sonido.

## Note:

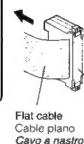
- La polarità dei diffusori collegati è la stessa se i loro cavi contrassegnati da una riga bianca vengono collegati ai terminali ⊕. Se i diffusori vengono collegati con le polarità invertite, l'effetto stereofonico ed i toni possono degradarsi.
- I diffusori di quest'unità non sono magneticamente schermati. Se vengono installati vicino o sopra un televisore, l'immagine di quest'ultimo può subire distorsioni. Installarli ad almeno 20 cm di distanza da televisori.
- Per installare i diffusori molto lontano dall'unità principale sono necessari cavi da acquistarsi separatamente.
- Nel collegare i cavi audio, controllare che il conduttore in rame, e non il suo isolante, faccia contatto direttamente con i terminali. La riproduzione non può altrimenti avere luogo.

## System connection

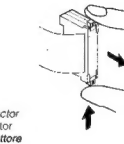
- Connect the flat cable connected to the CD player/receiver unit to the cassette deck unit.



- When connecting  
• Cuando conecte  
• Per il collegamento



- When disconnecting  
• Cuando desconecte  
• Per lo scollegamento

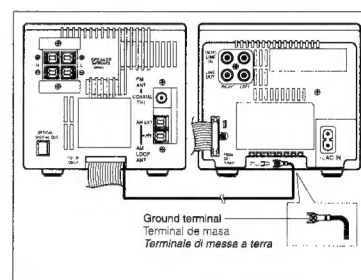


## Conexión del sistema

- Conecte el cable plano que está conectado a la unidad de CD/reproductor a la platina de cassette.

## Collegamento del sistema

- Collegare il cavo piatto collegato al lettore CD/spelare al registratore a cassette.



## CAUTION:

To prevent malfunction, connect the grounding wire to the ground terminal as shown. (Tighten using Philips type screwdriver.)

## PRECAUTION:

Para evitar fallas de funcionamiento, conecte el cable de masa al terminal de tierra como se muestra. (Apriete empleando un destornillador Philips.)

## ATTENZIONE:

Per evitare un funzionamento irregolare dell'unità, collegare il filo di terra al terminale di messa a terra nel modo mostrato nell'illustrazione. (Stringere con un cacciavite di tipo Philips.)

## Connection of external audio units

- Connection with a turntable (or MD player)

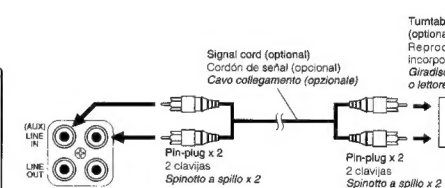
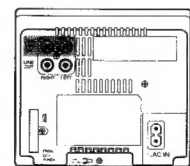
## Conexión de unidades externas de audio

- Conexión con un tocadiscos (o reproductor de MD)

## Collegamento di componenti esterni

- Collegamento con un giradischi (o lettore MD)

Cassette Deck unit  
Platina de cassette  
Registatore a cassette

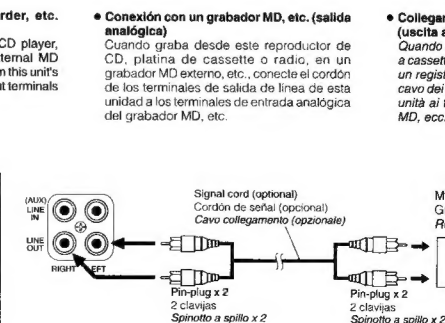
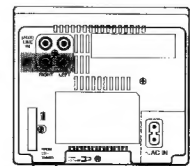


Turntable (with built-in equalizer) or MD player (optional)  
Reproductor de discos (con equalizador incorporado) o reproductor MD (opcional)  
Giradischi (con equalizzatore incorporato) o lettore MD (opzionale)

- Connection with an MD recorder, etc. (analog output)

When recording from this unit's CD player, cassette deck or radio to an external MD recorder, etc., connect the cord from this unit's line out terminals to the analog input terminals of the MD recorder, etc.

Cassette Deck unit  
Platina de cassette  
Registatore a cassette



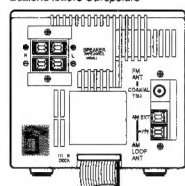
MD recorder, etc. (optional)  
Grabador MD, etc. (opcional)  
Registatore MD, ecc. (opzionale)

- **Connection with an MD recorder, etc. (digital output)**  
It is possible to transmit a digital sound signal from the CD player of this unit directly to an external MD recorder, etc. that is equipped with an optical input terminal. In this case, connect the cord from this unit's CD optical digital output terminal to the optical input terminal of the MD recorder, etc.
- An optical digital cord (optional) is required to make this connection. Refer to the instruction manual of the MD recorder, etc. for details.

- **Conexión con un grabador MD, etc. (salida digital)**  
Es posible transmitir una señal de sonido digital desde el reproductor de CD a esta unidad directamente a un grabador MD externo, etc., que esté equipado con un terminal de entrada óptica. En este caso, conecte el cordón del terminal de salida digital óptica de esta unidad de CD al terminal de entrada óptica del grabador MD, etc.
- Es necesario utilizar un cordón digital óptico (opcional), para efectuar esta conexión. Por detalles, refiérase al manual de instrucciones del grabador MD, etc.

- **Collegamento con un registratore MD, ecc. (uscita digitale)**  
E' possibile trasmettere il segnale digitale del lettore CD di questa unità direttamente ad un registratore MD esterno, ecc., fornito di un terminale di ingresso ottico. In questo caso, collegare l'uscita digitale ottica del lettore CD al terminale di ingresso ottico del registratore MD, ecc.
- Per eseguire questo collegamento è necessario un cavo digitale ottico (opzionale). Vedere il manuale di istruzioni del registratore MD, ecc., per ulteriori dettagli.

CD player/receiver unit  
Sección del reproductor de CD/  
reproductores  
Sezione lettore CD/Ascoltare



DIGITAL OPTICAL CORD

Optical digital cord (optional)  
Cordon digital optico (opcional)  
Cavo digitale ottico (opzionale)

MD recorder, etc. (optional)  
Grabador MD, etc. (opcional)  
Registratore MD, ecc. (opzionale)

**Note:**  
Regarding the connection with external units and their operations, refer to the instructions provided with those units.

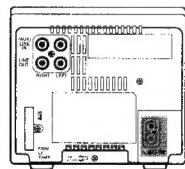
**Note:**  
En relación a la conexión de unidades externas y sus operaciones, refiérase a las instrucciones suministradas con esas unidades.

**Note:**  
Per il collegamento con unità esterne ed il loro funzionamento, vedere le istruzioni fornite in dotazione a tali unità.

## POWER SUPPLY

### Connection of AC power cord

- Connect the AC power cord after all other connections have been made.



Cassette Deck unit  
Pistina de cassette  
Registratore a cassette

Power cord  
Cordon de alimentation  
Cavo alimentazione

### CAUTIONS:

1. ONLY USE WITH JVC POWER CORD PROVIDED WITH THIS UNIT TO AVOID MALFUNCTION OR DAMAGE TO THE UNIT.
2. BE SURE TO UNPLUG THE POWER CORD FROM THE OUTLET WHEN GOING OUT OR WHEN THE UNIT IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.

**Note:**  
• When there is a power failure or the AC power cord is disconnected, the timer/clock setting is erased from memory. Reset the clock when the power supply is restored.

## ALIMENTACION

### Conexión del cordón de CA

- Conecte el cordón de CA después de haber terminado todas las conexiones.

### PRECAUCIONES:

1. PARA EVITAR FALLAS O DAÑOS EN LA UNIDAD UTILICE EL CORDON DE ALIMENTACION DE JVC SUMINISTRADO CON ESTA UNIDAD.
2. ASEGURESE DE DESENCHUFAR EL CORDON DE ALIMENTACION DEL TOMACORRIENTES CUANDO SALGA O CUANDO NO VAYA A UTILIZAR LA UNIDAD POR UN LARGO PERIODO.

**Note:**  
• Cuando hay un corte de energía eléctrica o cuando se desconecta el cordón de alimentación CA, el ajuste del temporizador/ reloj se borra de la memoria. Reposición el reloj cuando se restaure el suministro eléctrico.

## ALIMENTAZIONE

### Collegamento del cavo di alimentazione CA

- Collegare il cavo di alimentazione CA dopo aver eseguito tutti gli altri collegamenti.

### PRECAUZIONI:

1. UTILIZZARE SOLO IL CAVO DI ALIMENTAZIONE JVC IN DOTAZIONE A QUESTA UNITA' PER EVITARE DISFUNZIONI O DANNI ALL'UNITA' STESSA.
2. ACCERTARSI DI SCOLLEGARE IL CAVO DI ALIMENTAZIONE DALLA PRESA DI RETE QUANDO SI ESCE O QUANDO SI PREVEDE DI NON UTILIZZARE L'UNITA' PER UN PERIODO PROLUNGATO.

**Note:**  
• Quando si verifica un'interruzione di corrente oppure quando il cavo di alimentazione CA viene scollegato, l'impostazione del timer/orologio viene cancellata dalla memoria. Reimpostare l'orologio quando l'alimentazione viene riattivata.

## NAMES OF PARTS AND THEIR FUNCTIONS

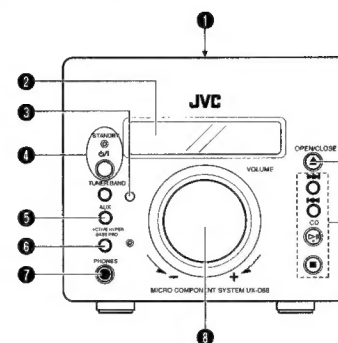
## NOMBRES DE LAS PARTES Y SUS FUNCIONES

## NOMI E FUNZIONI DELLE PARTI

### CD player/General section

### Reproductor de CD/sección general

### Lettore CD/sezione generale



- 1 CD holder
- 2 Display window
  - 1 Playback indicator (▶)
  - 2 Pause indicator (||)
  - 3 Function/Track number display
  - 4 Play time display
  - 5 Program mode indicator (PROGRAM)
  - 6 RANDOM play indicator
  - 7 Repeat play indicator (◀ ALL)
- 3 Remote sensor section
- 4 1 button and power STANDBY indicator
- 5 AUX button
- 6 ACTIVE HYPER-BASS PRO button and indicator
- 7 Headphones jack (PHONES) (3.5 mm dia. stereo mini)  
Connect headphones (impedance 16 Ω to 1 kΩ) to this jack. Speaker sound is automatically switched off when the headphones are connected.
- 8 VOLUME control knob
- 9 CD holder (▲) OPEN/CLOSE button
- 10 CD operation buttons  
CD SEARCH buttons (◀◀, ▶▶):  
Press to locate the beginning of a track and to start forward/reverse search operations.  
Play/pause button (▶||):  
Press to play a CD or to stop temporarily.  
Stop/clear button (■):  
Press to stop playing a CD or cancel programmed play. This also sets the CD mode.

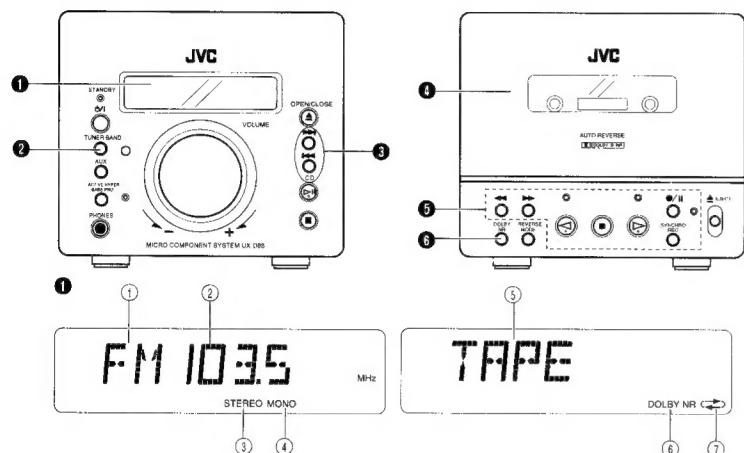
- 1 Compartimento del CD
- 2 Finestrella display
  - 1 Indicador (▶) de reproducción
  - 2 Indicador (||) de pausa
  - 3 Indicación de función/número de pista
  - 4 Indicación del tiempo de reproducción
  - 5 Indicador del modo de programa (PROGRAM)
  - 6 Indicador de reproducción aleatoria (RANDOM)
  - 7 Indicador de repetición de reproducción total (◀ ALL)
- 3 Sección sensor remoto
- 4 Botón de alimentación (1) e indicador de espera (STANDBY) de alimentación
- 5 Botón auxiliar (AUX)
- 6 Botón e indicador de hiper grave activo profesional (ACTIVE HYPER-BASS PRO)
- 7 Jack de audífonos (PHONES) (mini estéreo de 3,5 mm. de diám.)  
Conecte los audífonos (impedancia de 16 Ω a 1 kΩ), a este jack. El sonido de los altavoces se apaga automáticamente cuando se conectan los audífonos.
- 8 Mando de control de volumen (VOLUME)
- 9 Botón (▲) de apertura/cierre (OPEN/CLOSE) del compartimento del CD
- 10 Botones para operación del CD Botones CD SEARCH buttons (◀◀, ▶▶) de búsqueda (SEARCH) del CD.  
Presiónelos para ubicar el principio de una pista o para iniciar las operaciones de búsqueda hacia adelante/atrás.  
Botón (▶||) de reproducción/pausa:  
Presiónelo para reproducir un CD o para parar temporariamente.  
Botón (■) de parada/borrado:  
Presiónelo para detener la reproducción de un disco o cancelar la reproducción programada.  
Este también activa el modo de CD.

- 1 Piatto CD
- 2 Finestrella display
  - 1 Indicatore di riproduzione (▶)
  - 2 Indicatore di pausa (||)
  - 3 Display funzione/numero brano
  - 4 Display tempo di riproduzione
  - 5 Indicatore modo programmazione (PROGRAM)
  - 6 Indicatore riproduzione casuale (RANDOM)
  - 7 Indicatore riproduzione ripetuta (◀ ALL)
- 3 Sezione sensore telecomando
- 4 Interruttore di alimentazione (1) e indicatore di attesa (STANDBY).
- 5 Tasto ausiliario (AUX)
- 6 Tasto ed indicatore active hyper-bass pro (ACTIVE HYPER-BASS PRO)
- 7 Presa cuffie (PHONES) (mini stereo diam. 3,5 mm)  
Collegare le cuffie (impedenza da 16 Ω a 1 kΩ) a questa presa. Il suono dei diffusori viene eliminato automaticamente quando le cuffie vengono collegate.
- 8 Manopola volume (VOLUME)
- 9 Tasto apertura/chiusura piatto CD (▲) (OPEN/CLOSE)
- 10 Tasti funzionamento lettore CD  
Tasti CD SEARCH (◀◀, ▶▶):  
Premere questi tasti per localizzare l'inizio di un brano o per avviare le operazioni di ricerca in avanti/indietro.  
Tasto riproduzione/pausa (▶||):  
Premere questo tasto per riprodurre un CD oppure per interrompere temporaneamente la riproduzione.  
Tasto arresto/cancellazione (■):  
Premere questo tasto per interrompere la riproduzione di un CD o per cancellare la riproduzione programmata. Questo tasto imposta anche il modo del CD.

## Tuner/Deck section

## Sección del sintonizador/platina

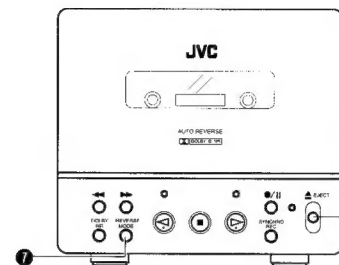
## Sezione sintonizzatore/registratore



- 1 Display window  
 ① Band indicator  
 ② Radio frequency display  
 ③ STEREO indicator  
 ④ MONO indicator  
 ⑤ Tape (TAPE) mode display  
 ⑥ DOLBY B NR indicator (DOLBY NR)  
 ⑦ Reverse mode indicator (↔/↔/↔)  
 • See page 28 for the clock adjustment.
- 2 TUNER/BAND button  
 Press to select tuner mode.  
 Press to select the band.
- 3 Tuning buttons (◀◀/▶▶)  
 4 Cassette holder  
 5 Cassette operation buttons  
 ◀◀: Press to fast wind the tape from right to left or to start Music scan.  
 ▶▶: Press to fast wind the tape from left to right or to start Music scan.  
 ◀: Press to play back the tape in the reverse direction.  
 ■: Press to stop the tape.  
 This also sets the TAPE mode.  
 ▶: Press to play back the tape in the forward direction.  
 ●/II: Press to set the unit to the record or record-pause mode.  
 SYNCHRO REC: Press to start CD synchro recording.
- 6 DOLBY NR button  
 Set to ON when recording or playing back tapes using the noise reduction system.

- 1 Ventanilla de indicación  
 ① Indicador de banda  
 ② Indicación de frecuencia de radio  
 ③ Indicador estéreo (STEREO)  
 ④ Indicador monofónico (MONO)  
 ⑤ Indicación del modo de cinta (TAPE)  
 ⑥ Indicador de reducción de ruido DOLBY B NR (DOLBY NR)  
 ⑦ Indicador del modo de inversión (↔/↔/↔)  
 • Para el ajuste del reloj vea la página 28.
- 2 Botón sintonizador/banda (TUNER/BAND)  
 Presiónelo para seleccionar el modo de sintonizador.  
 Presiónelo para seleccionar la banda.
- 3 Botones de sintonización (◀◀/▶▶)  
 4 Portacassetes  
 5 Botones de operación del cassette  
 ◀◀: Presione el bobinado rápido de la cinta de derecha a izquierda o para iniciar la búsqueda de música.  
 ▶▶: Presione el bobinado rápido de la cinta de izquierda a derecha para iniciar la búsqueda de música.  
 ◀: Presione para reproducir la cinta en sentido contrario.  
 ■: Presione la para parar la cinta. Esto también activa el modo TAPE.  
 ▶: Presione para reproducir la cinta hacia adelante.  
 ●/II: Presione para activar el modo de grabación o pausa de grabación en una unidad.  
 SYNCHRO REC: Presione para iniciar la grabación sincronizada de CD.
- 6 Botón de reducción de ruido (DOLBY NR)  
 Coloque en ON cuando graba o reproduce cintas utilizando el sistema de reducción de ruido.

- 1 Finestrella display  
 ① Indicatore banda  
 ② Display frequenza  
 ③ Indicatore stereo (STEREO)  
 ④ Indicatore mono (MONO)  
 ⑤ Display modo registratore (TAPE)  
 ⑥ Indicatore modo DOLBY B NR (DOLBY NR)  
 ⑦ Indicatore modo reverse (↔/↔/↔)  
 • Vedi pag. 28 per la regolazione dell'orologio.
- 2 Tasto sintonizzatore/banda (TUNER/BAND)  
 Premere questo tasto per selezionare il modo del sintonizzatore.  
 Premere questo tasto per selezionare la banda.
- 3 Tasti sintonizzazione (◀◀/▶▶)  
 4 Vano portacassetta  
 5 Tasti funzionamento registratore a cassette  
 ◀◀: Premere per avvolgere rapidamente il nastro da destra a sinistra oppure per avviare la ricerca musicale.  
 ▶▶: Premere per avvolgere rapidamente il nastro da sinistra a destra oppure per avviare la ricerca musicale.  
 ◀: Premere per riprodurre il nastro nella direzione inversa.  
 ■: Premere per interrompere lo scorrimento del nastro. Questo tasto serve anche per impostare il modo TAPE.  
 ▶: Premere per riprodurre il nastro nella direzione normale.  
 ●/II: Premere per portare l'unità nel modo di registrazione o di pausa della registrazione.  
 SYNCHRO REC: Premere per avviare la registrazione sincronizzata di un CD.
- 6 Tasto sistema di riduzione del rumore Dolby (DOLBY NR)  
 Impostare su ON quando si desidera registrare o riprodurre un nastro utilizzando il sistema di riduzione del rumore.



- 1 REVERSE MODE switch  
 ↔: For single-side recording or playback  
 ↔: For recording or playback on both sides  
 ↔: For continuous play  
 2 EJECT button

- 1 Conmutador de modo de inversión (REVERSE MODE)  
 ↔: Para grabación o reproducción de un solo lado  
 ↔: Para grabación o reproducción de ambos lados  
 ↔: Para reproducción continuada  
 2 Botón de eyección (EJECT)

- 1 Selettore modo reverse (REVERSE MODE)  
 ↔: Per la registrazione o riproduzione su un solo lato  
 ↔: Per la registrazione o riproduzione su entrambi i lati  
 2 Tasto di espulsione (EJECT)

## REMOTE CONTROL UNIT

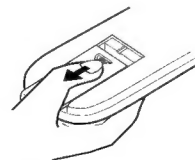
## UNIDAD DE CONTROL REMOTO

## UNITA' DI TELECOMANDO

## Preparation before use

## • Installing batteries in the remote control unit

1. Remove the battery cover from the back of the remote control unit.
2. Insert two "R6/AA (15F)" size batteries.  
 • Insert the batteries with the ⊕ and ⊖ terminals, matching the indication inside the battery compartment.
3. Replace the cover.



## • Battery replacement

When the remote control operation becomes unstable or the distance from which remote control is possible decreases, replace the batteries.

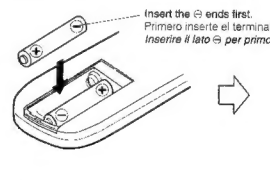
## Using the remote control unit

- Point at the remote sensor and operate within about 7 m (approx. 23 ft).
- The remote control range is less when the unit is used at an angle.
- Do not expose the remote sensor to strong direct sunlight or artificial lighting.
- Make sure that there are no obstacles between the remote sensor and the unit.

## Preparativos antes usarla

## • Instalación de las pilas en la unidad de control remoto

1. Extraiga la tapa de las pilas de la parte trasera de la unidad de control remoto.
2. Inserte dos pilas de tamaño "R6/AA (15F)".  
 • Inserte las pilas con los terminales ⊕ y ⊖ de acuerdo a la indicación en el interior del compartimento de las pilas.
3. Recoloque la tapa.



## • Reemplazo de las pilas

Cuando el funcionamiento del controlador remoto se vuelve inestable o la distancia dentro de la cual actúa se reduce, reemplace las pilas.

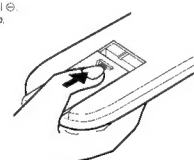
## Utilización de la unidad de control remoto

- Apúntela hacia el sensor remoto y hágala funcionar dentro de un radio de 7 m. aprox.
- El radio de acción del controlador remoto es menor cuando se lo apunta en ángulo.
- No exponga el sensor remoto a la luz directa del sol o a fuerte iluminación artificial.
- Asegúrese de que no hayan obstáculos entre el sensor remoto y el controlador remoto.

## Preparativi prima dell'uso

## • Installazione delle batterie nel telecomando

1. Rimuovere il coperchio del vano batterie dal retro del telecomando.
2. Inserire due batterie di formato "R6/AA (15F)".  
 • Inserire le batterie con i terminali ⊕ e ⊖ orientati come indicato all'interno del vano stesso.
3. Reinstallare il coperchio.



## • Sostituzione batterie

Quando il funzionamento dell'unità di telecomando è intermittente oppure quando la distanza utile diminuisce, sostituire le batterie.

## Uso dell'unità di telecomando

- Utilizzare l'unità di telecomando entro una distanza di circa 7 metri puntandola verso la sezione sensor telecomando.
- Il campo di funzionamento dell'unità di telecomando è inferiore se essa viene utilizzata da una posizione angolare.
- Non esporre la sezione sensor telecomando a luce naturale o artificiale intensa.
- Accertarsi che non vi siano ostacoli tra la sezione sensor telecomando e l'unità di telecomando.

The following operations can be performed using the remote control unit.

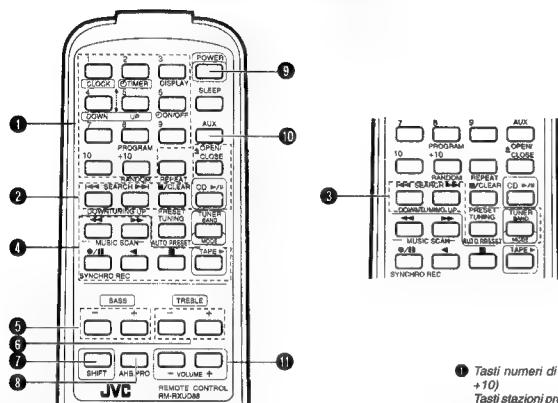
- Check the operation button functions carefully and operate them correctly.

Las siguientes operaciones deben ser ejecutadas utilizando la unidad de control remoto.

- Compruebe detalladamente el funcionamiento de los botones de operación y opérellos correctamente.

Le operazioni seguenti possono essere eseguite utilizzando l'unità di telecomando.

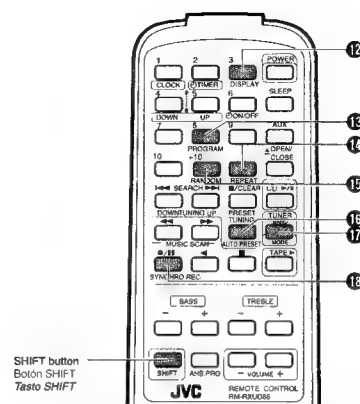
- Controllare con attenzione le funzioni dei tasti ed utilizzare quest'ultimi in modo corretto.



- 1 Track number buttons (No. 1 to No. 10, +10)
- 2 Preset station buttons (No. 1 to No. 10, +10)
- 3 CD operation buttons  
CD holder (▲) OPEN/CLOSE button  
Play/pause button (▶||):  
Press to play a CD or to stop temporarily.  
Stop (■) CLEAR button  
SEARCH (◀◀, ▶▶) buttons
- 4 Radio operation buttons  
UP and DOWN buttons  
PRESET TUNING button  
TUNER/BAND button  
Press to select tuner mode.  
Press to select the band.
- 5 Cassette operation buttons  
◀◀: Press to fast wind the tape from right to left or to start Music scan.  
▶▶: Press to fast wind the tape from left to right or to start Music scan.  
●/II: Press to set the unit to the record or record-pause mode.  
◀: Press to play back the tape in the reverse direction.  
▶: Press to stop the tape.  
This also sets the TAPE mode.  
▶: Press to play back the tape in the forward direction.
- 6 BASS buttons (+, -)
- 7 TREBLE buttons (+, -)
- 8 SHIFT button
- 9 ACTIVE HYPER-BASS (AHB) PRO button
- 10 POWER button
- 11 AUX button
- 12 VOLUME buttons (+, -)

- 1 Botones (No. 1 a No. 10, +10) de número de pista
- 2 Botones (No. 1 a No. 10, +10) de estación preintonizada
- 3 Botones para operación del CD  
Botón (▲) de apertura/cierre (OPEN/CLOSE) del compartimiento del CD  
Botón (▶||) de reproducción/pausa:  
Presiónelo para reproducir un CD o para pararlo temporalmente.  
Botón de parada/borrado (■) CLEAR  
Botones de búsqueda (SEARCH) (◀◀, ▶▶)
- 4 Botones para operación de la radio  
Botones arriba y abajo (UP y DOWN)  
Botón de presintonización (PRESET TUNING)  
Botón sintonizador/banda (TUNER/BAND)  
Presiónelo para seleccionar el modo de sintonizador.
- 5 Botones de operación del cassette  
◀◀: Presione el bobinado rápido de la cinta de derecha a izquierda o para iniciar la búsqueda de música.  
▶▶: Presione el bobinado rápido de la cinta de izquierda a derecha para iniciar la búsqueda de música.  
●/II: Presione para activar el modo de grabación o pausa de grabación en la unidad.  
◀: Presione para reproducir la cinta en sentido contrario.  
▶: Presione para parar la cinta.  
Esto también activa el modo TAPE.  
▶: Presione para reproducir la cinta hacia adelante
- 6 Botones de grave (BASS) (+, -)  
(Límites de control de -6 a 6.)
- 7 Botón de agudos (TREBLE) (+, -)  
(Límites de control de -6 a 6.)
- 8 Botón de pase (SHIFT)
- 9 Botón de hiper grave activo profesional (ACTIVE HYPER-BASS (AHB) PRO)
- 10 Botón de alimentación (POWER)
- 11 Botón auxiliar (AUX)
- 12 Botones de volumen (VOLUME) (+, -)

- 1 Tasti numeri di brano (dal No. 1 al No. 10, +10)
- 2 Tasti stazioni preselezionate (dal No. 1 al No. 10, +10)
- 3 Tasti funzionamento lettore CD  
Tasto apertura/chiusura piatto CD (▲) (OPEN/CLOSE)  
Tasto riproduzione/pausa (▶||):  
Premerlo per riprodurre un CD o per interrompere temporaneamente la riproduzione.  
Tasto arresto/cancellazione (■) CLEAR  
Tasti ricerca (SEARCH) (◀◀, ▶▶)
- 4 Tasti funzionamento sintonizzatore  
Tasti spostamento alto/basso (UP e DOWN)  
Tasto sintonizzazione preselezioni (PRESET TUNING)  
Tasto sintonizzatore/banda (TUNER/BAND)  
Premere questo tasto per selezionare il modo del sintonizzatore.  
Premere questo tasto per selezionare la banda.
- 5 Tasti funzionamento registratore a cassette  
◀◀: Premere per avvolgere rapidamente il nastro da destra a sinistra oppure per avviare la ricerca musicale.  
▶▶: Premere per avvolgere rapidamente il nastro da sinistra a destra oppure per avviare la ricerca musicale.  
●/II: Premere per portare l'unità nel modo di registrazione o di pausa della registrazione.  
◀: Premere per riprodurre il nastro nella direzione inversa.  
■: Premere per interrompere lo scorrimento del nastro.  
Questo tasto serve anche per innestare il modo TAPE.  
▶: Premere per riprodurre il nastro nella direzione normale.
- 6 Tasti bassi (BASS) (+, -)  
(Gamma controllo da -6 a 6.)
- 7 Tasti acuti (TREBLE) (+, -)  
(Gamma controllo da -6 a 6.)
- 8 Tasto cambiamento funzione (SHIFT)
- 9 Tasto Active Hyper-Bass Pro (ACTIVE HYPER-BASS (AHB) PRO)
- 10 Tasto alimentazione (POWER)
- 11 Tasto ausiliario (AUX)
- 12 Tasti volume (VOLUME) (+, -)



Press the following buttons while holding down the SHIFT button 7.

- 12 DISPLAY button  
Use to display the current time.
- 13 PROGRAM button
- 14 REPEAT play button
- 15 RANDOM play button
- 16 AUTO PRESET button
- 17 FM MODE button
- 18 SYNCHRO REC button

Presione los siguientes botones mientras mantiene presionado el botón 7 SHIFT.

- 12 Botón de indicación (DISPLAY)  
Utilícelo para llamar la hora actual.
- 13 Botón programa (PROGRAM)
- 14 Botón de repetición de reproducción (REPEAT)
- 15 Botón de reproducción aleatoria (RANDOM)
- 16 Botón de presintonización automática (AUTO PRESET)
- 17 Botón de modo de FM (FM MODE)
- 18 Botón de grabación sincronizada (SYNCHRO REC)

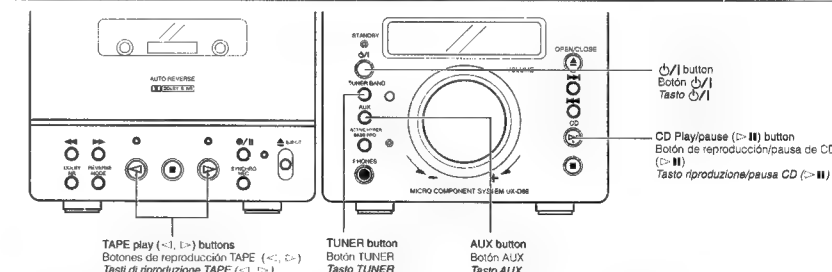
Premere i seguenti tasti tenendo premuto il tasto SHIFT 7.

- 12 Tasto display (DISPLAY)  
Utilizzarlo per visualizzare l'orario corrente.
- 13 Tasto programmazione (PROGRAM)
- 14 Tasto riproduzione ripetuta (REPEAT)
- 15 Tasto riproduzione casuale (RANDOM)
- 16 Tasto preselezione automatica (AUTO PRESET)
- 17 Tasto modo FM (FM MODE)
- 18 Tasto di registrazione sincronizzata (SYNCHRO REC)

## SWITCHING THE POWER ON/OFF

## CONEXION/DESCONEXION DE LA ALIMENTACION

## ACCENSIONE E SPEGNIMENTO



### Switching the power on/off

- Switching on:



- Switching off:



### Conexión/desconexión de la alimentación

- Conexión:



- Desconexión:

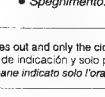


### Accensione e spegnimento dell'unità

- Accensione:



- Spegnimento:



The STANDBY indicator goes out.  
El indicador STANDBY se apaga.  
L'indicatore STANDBY si spegne.

- The indicator in the display window lights.
- Se apaga el indicador en la ventanilla, se enciende.
- L'indicatore nel display si illumina.

The STANDBY indicator lights.  
El indicador STANDBY se enciende.  
L'indicatore STANDBY si illumina.

- The indicator in the display window goes out and only the clock is indicated.
- Se apaga el indicador en la ventanilla de indicación y solo permanece la indicación del reloj.
- L'indicatore nel display si spegne e rimane indicato solo l'orario.

**One touch operation (COMPU PLAY)**

Even when the power is set to **STANDBY**, pressing the button shown below switches on the power and selects the source.

**Operación de un solo toque (COMPU PLAY)**

Cuando la alimentación está colocada en **STANDBY**, el presionar el botón mostrado abajo conecta la alimentación y selecciona la fuente.

**Funzionamento ad un solo tocco (COMPU PLAY)**

Anche se l'unità si trova nel modo **STANDBY**, premendo uno dei tasti indicati di seguito essa si accende e una sorgente di segnale viene attivata.

	Function mode Modo de función Modo di funzionamento	Operations Operazioni
	CD	When this button is pressed with a CD loaded, CD playback begins. Quando se presiona este botón habiendo un CD colocado, comienza la reproducción del mismo. Se questo tasto viene premuto a lettore CD carico, la riproduzione del CD ha immediatamente inizio.
	TAPE	When this button is pressed with a tape loaded, tape playback begins. Quando se presiona este botón habiendo una cinta colocada, comienza la reproducción de la misma. Se questo tasto viene premuto a registratore a cassette carico, la riproduzione della cassetta ha immediatamente inizio.
	TUNER	When this button is pressed, the tuner is engaged. Quando se presiona este botón, se activa el sintonizador. Se questo tasto viene premuto, il sintonizzatore si accende.
	AUX	A sound source connected to the AUX terminal can be engaged. Es posible activar una fuente de sonido que esté conectada al terminal AUX. Può attivare una sorgente di segnale collegata al terminale AUX.

When the **(A)** OPEN/CLOSE button is pressed, the sound source does not switch, but the CD holder can open or close.

**Notes:**

- When switching off the power, be sure to press the **OFF** button.
- The **COMPU PLAY** button on the remote control has the same function as that on the main unit.

Cuando se presiona el botón **(A)** OPEN/CLOSE la fuente de sonido no se conmuta, pero se puede abrir o cerrar el compartimiento del CD.

**Notes:**

- Para desconectar la alimentación asegúrese de presionar el botón **OFF**.
- El botón **COMPU PLAY** del controlador remoto tiene la misma función que el de la unidad principal.

Quando il tasto **OPEN/CLOSE (A)** viene premuto, la fonte sonora non cambia ma il piatto del CD viene aperto o chiuso.

**Note:**

- Spegnere l'unità solo premendo il tasto **OFF**.
- Il tasto **COMPU PLAY** del telecomando possiede le stesse funzioni di quello omonimo dell'unità principale.

**VOLUME, TONE AND OTHER CONTROLS****VOLUME buttons (using the remote control unit)**

- +**: Use to increase the volume.
- : Use to decrease the volume.

(Control range from VOL 0 to VOL 50.)

**VOLUMEN, TONO Y OTROS CONTROLES****Botones VOLUME (usando el mando a distancia)**

- +**: Uselo para aumentar el volumen.
- : Uselo para reducir el volumen.

(Los límites de control van de VOL 0 a VOL 50.)

**VOLUME, TONI ED ALTRI COMANDI****Tasti VOLUME (con l'unità di telecomando)**

- +**: Per aumentare il volume.
- : Per diminuire il volume.

(Gamma controllo volume da VOL 0 a VOL 50.)

**BASS/TREBLE buttons (using the remote control unit)**

To set the bass or treble level, press the corresponding button. The level setting ranges from -6 to 6.

**Botones BASS/TREBLE (usando el mando a distancia)**

Para ajustar el nivel de grave o agudo, presione el botón correspondiente. El ajuste de nivel va de -6 a 6.

**Tasti BASS/TREBLE (con l'unità di telecomando)**

Per impostare il livello dei bassi o degli acuti, premere il tasto corrispondente. L'impostazione del livello spazia da -6 a 6.

**ACTIVE HYPER-BASS PRO button**

**ON:** The **ACTIVE HYPER-BASS PRO** indicator lights up. Set to this position to activate **ACTIVE HYPER-BASS PRO** sound.

**OFF:** The **ACTIVE HYPER-BASS PRO** indicator goes out. Set to this position when **ACTIVE HYPER-BASS PRO** sound is not required.

**Botón de hiper graves activos profesionales (ACTIVE HYPER-BASS PRO)**

**ON:** Se enciende el indicador **ACTIVE HYPER-BASS PRO**. Colóquelo en esta posición para activar el sonido hiper grave activo profesional.

**OFF:** Se apaga el indicador **ACTIVE HYPER-BASS PRO**. Colóquelo en esta posición cuando no desee escuchar el sonido de hiper grave activo profesional.

**Tasto ACTIVE HYPER-BASS PRO**

**ON:** L'indicatore **ACTIVE HYPER-BASS PRO** si illumina. Selezionare questa impostazione per attivare la funzione **Active Hyper Bass Pro**.

**OFF:** L'indicatore **ACTIVE HYPER-BASS PRO** si spegne. Selezionare questa impostazione per disattivare la funzione **Active Hyper Bass Pro**.

**HANDLING CDs**

Since dirty, damaged and warped CDs may damage the unit, take care regarding the following:

- Usable CDs**  
Use CDs with the mark shown.
- Notes on handling CDs**
  - Do not touch the reflective recorded surface.
  - Do not stick or write anything on the label side.
  - Do not bend CDs.
- Storage**
  - After removing a CD from the unit, be sure to put it back in its case.
  - Do not expose CDs to direct sunlight, high temperatures from a heater, etc., high humidity, or dust.
- Cleaning CDs**
  - Before loading a CD, wipe off any dust, dirt or fingerprints with a soft cloth. CDs should be cleaned by wiping radially from the center to the edge.

Never use thinner, benzine, record cleaner or antistatic spray.

**MANIPULACION DE CD**

Como los CD sucios, dañados o alabeados pueden dañar la unidad, tome precauciones en relación a lo siguiente:

- CD utilizables**  
Utilice CD con la marca indicada.
- Notas sobre manipulación de CD**
  - No toque la superficie grabada reflejante.
  - No adhiera ni escriba nada sobre el lado de la etiqueta.
  - No doble los CD.
- Almacenamiento**
  - Después de extraer un CD de la unidad, asegúrese de colocarlo otra vez en su caja.
  - No exponga los CD a la luz directa del sol, altas temperaturas provenientes de un calentador, etc., alta humedad, o polvo.
- Limpieza de CD**
  - Antes de colocar un CD, limpie el polvo, suciedad o huellas digitales, con un paño suave. Los CD deben ser limpiados radialmente desde el centro hacia el borde.

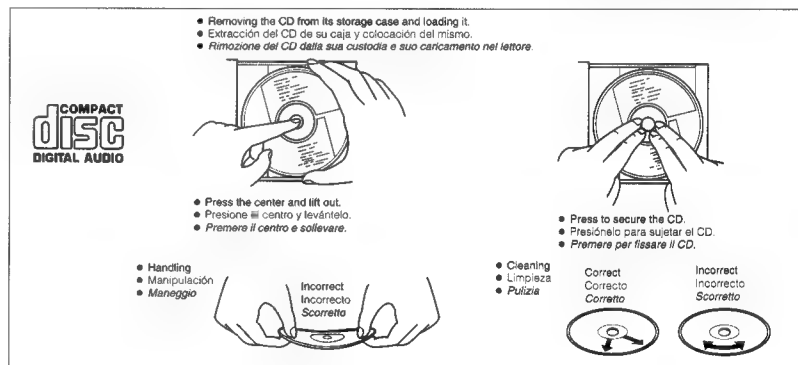
Nunca utilice solvente, bencina, limpiador de discos o aerosol antiestático.

**MANEGGIO DEI CD**

Dato che CD sporchi, danneggiati o deformati possono danneggiare l'unità, fare attenzione a quanto segue:

- CD utilizzabili**  
Utilizzare solo CD recanti il marchio indicato.
- Note sul maneggio dei CD**
  - Non toccare la superficie registrata iridescente.
  - Non incollare o scrivere alcunché sul lato etichettato.
  - Non piegare i CD.
- Conservazione**
  - Dopo aver rimosso un CD dall'unità, accertarsi di riporlo nella sua custodia.
  - Non esporre i CD alla luce solare diretta, a temperature elevate, ad umidità elevate o a polvere.
- Pulizia CD**
  - Prima di inserire un CD, pulire polvere, sporco o impronte digitali con un panno morbido. I CD devono essere puliti strofinando radialmente, dal centro verso il bordo.

Non utilizzare mai diluente, benzina, liquido pulente per dischi o spray antistatici.





### Playing an entire CD

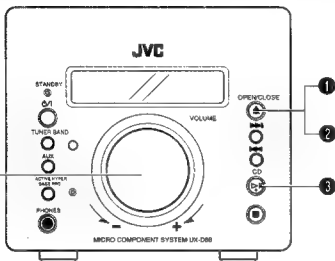
The following example of playing an entire CD assumes a CD with 12 tracks and a total playing time of 48 minutes 57 seconds.

#### Operate in the order shown

### Reproducción de un CD completo

El siguiente ejemplo de reproducción de un CD completo supone que se ha colocado un CD con 12 pistas y un tiempo total de reproducción de 48 minutos y 57 segundos.

#### Opere in **il** orden mostrado



- 1 Press to open the CD holder. (The power is switched on.)
- 2 Load a CD with the label side facing up and close the CD holder.
- 3 Press to start play.
- 4 Adjust.

#### Note:

When the CD holder is closed by pressing the ►► button, the CD starts as soon as the CD holder is closed.

- 1 Presione para abrir el compartimiento del CD. (La alimentación está conectada.)
- 2 Coloque un CD con la etiqueta apuntando hacia arriba y cierre el compartimiento del CD.
- 3 Presione para iniciar la reproducción.
- 4 Ajuste.

#### Note:

Cuando se cierra el compartimiento del CD presionando el botón ►►, la unidad comienza a reproducir el mismo tan pronto como se cierra el compartimiento del CD.

• 8-cm (3") CDs can be used in this unit without an adaptor.

• Los CD de 8-cm, pueden ser usados con esta unidad sin necesidad de adaptador.

- 1 Premere il tasto per aprire il piatto del CD. (L'alimentazione viene attivata).
- 2 Inserire un CD col lato etichettato in alto e quindi chiudere il piatto del CD.
- 3 Premere il tasto per l'avvio della riproduzione.
- 4 Regolare.

#### Note:

Quando il piatto del CD viene chiuso premendo il tasto ►►, la riproduzione del CD si avvia non appena il piatto è chiuso.

• La riproduzione di CD da 8 cm non richiede l'uso di alcun adattatore.

- To stop in the middle of a CD  
During play, press the stop/clear (■) button to stop play.

- Para detener la reproducción de un CD en la mitad de la misma  
Presione el botón (■) de parada/borrado para detener la reproducción.

- The total number of tracks and total playback time are displayed.
- La unidad indica el número total de pistas y el tiempo total de reproducción.
- Viene visualizzato il numero totale di brani ed il tempo totale di riproduzione.

12 48:57

- To stop a CD temporarily  
Press the ►► button to stop play temporarily. (The "II" indicator lights). When pressed again, play resumes from the point where it was paused.

#### Caution:

To change CDs, press the stop/clear (■) button; check that the CD has stopped rotating completely before unloading it.

#### Notes:

- When no CD is loaded, "NO DISC" is indicated in the display window. This indication may also appear when a CD is loaded upside down.
- The following indication may appear when a CD is dirty or scratched, or when the CD is loaded upside down.

In such a case, check the CD and insert again after cleaning the CD or turning it over.

NO DISC

- Do not use the unit at excessively high or low temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).
- After play, unload the CD.
- If mistracking occurs during play, lower the volume.

- No utilice la unidad en temperaturas excesivamente altas o bajas. Los límites de temperatura recomendados son de 5°C a 35°C.
- Después de la reproducción extraiga el CD.
- Si ocurre un error de seguimiento durante la reproducción, baje el volumen.

- Per interrompere temporaneamente la riproduzione del CD  
Premere il tasto ►► per interrompere temporaneamente la riproduzione (l'indicatore "II" si illumina). Quando il tasto viene premuto nuovamente, la riproduzione riprende dalla posizione dove era stata interrotta.

#### Attenzione:

- Per cambiare i CD, premere il tasto arresto/cancellazione (■); controllare che il CD abbia smesso completamente di girare prima di estrarlo.

#### Note:

- Quando non è stato inserito alcun CD, l'indicazione "NO DISC" viene visualizzata nel display. Questa indicazione può apparire anche quando un CD viene inserito rovescio. In tali casi, controllare il CD e quindi reinserirlo dopo averlo pulito o voltato.
- L'indicazione seguente potrebbe apparire quando un CD è sporco o graffiato oppure quando il CD viene inserito rovescio. In tali casi, controllare il CD e quindi reinserirlo dopo averlo pulito o voltato.

- Non utilizzare l'unità con temperature eccessivamente elevate o basse. La gamma raccomandata va dal 5°C al 35°C.
- Dopo la riproduzione, togliere il CD.
- Se la lettura del CD fosse scorretta durante la riproduzione, abbassare il volume.

### Skip play

- During play, it is possible to skip forward to the beginning of the next track or back to the beginning of the track being played or the previous track; when the beginning of the required track has been located, play starts automatically.

#### To listen to the next track...

Press the ►► button once to skip to the beginning of the next track.

#### To listen to the previous track...

Press the ◀◀ button to skip to the beginning of the track being played. Press twice quickly to skip to the beginning of the previous track.

### Search play (to locate the required position on the CD)

- The required position can be located using fast-forward or reverse search while playing a CD.

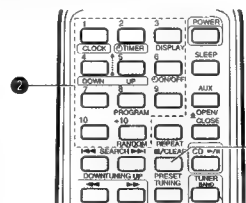
Keep pressing for fast-forward search.

Mantenga presionado para la búsqueda progresiva rápida. Tenere premuto per la ricerca rapida all'indietro.

- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

### Direct access play (using the remote control unit)

- Pressing any of the track number buttons will start play from the beginning of the designated track without you having to press the ►►/II button. (This function cannot be used during programmed play.)



- 1 Press the ■/CLEAR button to set to the CD mode.
- 2 Designate the required track using the track number buttons.

- To designate track numbers 1 to 10, press the track number button corresponding to the track number.

- To designate track number 11 or higher, press the +10 button the required number of times, then a track number button. (Example: To designate the 20th track, press the +10 button once, then press track number button 10.)

- +10 button: Each time this button is pressed, the number increases by 10. First press this button to set the 10's digit, then press the track number button to set the 1's digit.

### Reproducción con salto

- Durante la reproducción es posible saltar hacia adelante hasta el principio de la próxima pista o hacia atrás hasta el principio de la pista que está siendo reproducida o de la pista anterior; cuando haya localizado el principio de la pista deseada, la reproducción se inicia automáticamente.

#### Para escuchar la próxima pista...

Presione una vez el botón ►► para saltar al principio de la próxima pista.

#### Para escuchar la pista anterior...

Presione el botón ◀◀ para saltar al principio de la pista que está siendo reproducida. Presiónelo dos veces rápidamente para saltar al principio de la pista anterior.

### Reproducción con búsqueda (para localizar la posición deseada en el CD)

- La posición deseada puede ser ubicada utilizando la búsqueda de avance rápido o invertida mientras reproduce un CD.



Keep pressing for fast-forward search.

Mantenga presionado para la búsqueda progresiva rápida. Tenere premuto per la ricerca rapida in avanti.

- Mantenga presionado el botón; la búsqueda con reproducción se inicia lentamente y luego aumenta gradualmente la velocidad.
- Como en el modo de búsqueda es posible escuchar el sonido a bajo volumen (aproximadamente a un cuarto del nivel normal), monitoree el sonido y suelte el botón cuando haya localizado la posición deseada.

### Reproducción por acceso directo (utilizando la unidad de control remoto)

- Si presiona cualquiera de los botones de número de pista la reproducción se iniciará desde el principio de la pista escogida sin que tenga que presionar el botón ►►/II. (Esta función no puede ser usada durante la reproducción programada.)

### Riproduzione con salto

- Durante la riproduzione è possibile saltare all'inizio del brano successivo oppure all'inizio del brano in corso di riproduzione o di un brano precedente; la riproduzione inizia automaticamente quando l'inizio del brano desiderato viene raggiunto.

#### Per ascoltare il brano successivo...

Premere una volta il tasto ►► per saltare all'inizio del brano successivo.

#### Per ascoltare il brano precedente...

Premere il tasto ◀◀ per saltare all'inizio del brano in corso di riproduzione. Premerlo due volte in rapida successione per saltare all'inizio del brano precedente.

### Riproduzione con ricerca (per localizzare una determinata posizione sul CD)

- La posizione desiderata può essere localizzata utilizzando la ricerca rapida in avanti o all'indietro durante la riproduzione di un CD.

- Tenere premuto il tasto; la riproduzione con ricerca inizia lentamente e quindi aumenta gradualmente di velocità.
- Dato che il suono può essere udito a basso volume (circa un quarto del livello normale) nel modo di ricerca, ascoltare e rilasciare il tasto quando la posizione desiderata viene raggiunta.

### Riproduzione ad accesso diretto (utilizzando l'unità di telecomando)

- La pressione di uno qualsiasi dei tasti del numero del brano avvia la riproduzione dall'inizio del brano designato senza dover premere il tasto ►►/II. (Questa funzione non può essere utilizzata durante la riproduzione programmata.)

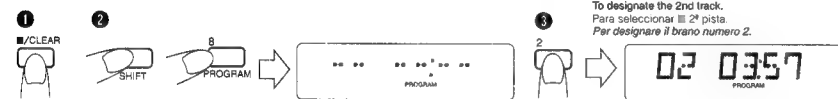
- 1 Premere il tasto ■/CLEAR per impostare il modo del lettore CD.
- 2 Designare il brano desiderato utilizzando i tasti dei numeri di brano.
- Per designare i numeri di brano da 1 a 10, premere il tasto numerico corrispondente al numero del brano.

- Per designare il numero 11 o un numero maggiore, premere il tasto +10 per il numero di volte necessario e quindi un tasto numerico. (Esempio: Per indicare il 20° brano, premere una volta il tasto +10 e quindi il tasto di numero di brano 10).
- Tasto +10: Ogni volta che questo tasto viene premuto, il numero aumenta di 10. Premere questo tasto per impostare le decine e quindi premere un tasto numerico per impostare le unità.

- **To skip to another track during play**  
When the required track number button is pressed, the display shows the designated track number and play starts from the beginning of the designated track.

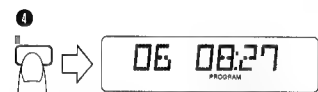
#### Programmed play (using the remote control unit)

- Up to 20 tracks can be programmed to be played in any required order.  
The total playing time of programmed tracks is displayed (up to 99 minutes, 59 seconds).  
(Example: When programming the 2nd track to be played first, and the 6th track next, then the 12th track, etc.)

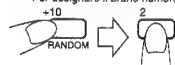


To designate the 2nd track.

Para seleccionar la 2ª pista.  
Per designare il brano numero 2.



To designate the 12th track.  
Para seleccionar la 12ª pista.  
Per designare il brano numero 12.



The total playback time of programmed tracks is displayed.  
Se visualizza il tempo di riproduzione total de las pistas programadas.  
Il tempo di riproduzione totale dei brani programmati viene visualizzato.



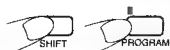
The 12th track  
La 12ª pista  
Il brano numero 12

- 1 Press the **■/CLEAR** button.
- 2 Press the **PROGRAM** button while pressing the **SHIFT** button to set to the programming mode.
- 3 Release the **SHIFT** button.
- 4 Press to designate the required track number.
- 5 Designate the remaining tracks by pressing the track number buttons.
- 6 Press the **▶/II** button when programming is completed. Programmed play starts.

- 1 Presione el botón **■/CLEAR**.
- 2 Para activar el modo de programación, presione el botón **PROGRAM** al mismo tiempo que presiona el botón **SHIFT**.
- 3 Suelte el botón **SHIFT**.
- 4 Presione para seleccionar el número deseado de pista.
- 5 Designe las pistas restantes presionando los botones de número de pista.
- 6 Cuando termine la programación presione el botón **▶/II**. Se inicia la reproducción programada.

- 1 Premere il tasto **■/CLEAR**.
- 2 Premere il tasto **PROGRAM** del timer mentre si mantiene premuto **SHIFT** per impostare il modo di programmazione.
- 3 Rilasciare il tasto **SHIFT**.
- 4 Designare il numero di brano desiderato con i tasti numerici.
- 5 Designare gli altri brani con i tasti numerici.
- 6 Premere il tasto **▶/II** quando la programmazione è terminata. La riproduzione programmata si avvia.

**To confirm the details of a program...**  
Press the **PROGRAM** button while pressing the **SHIFT** button; the tracks making up the program will be displayed in programmed order.



**Para confirmar los detalles de un programa...**  
Presione el botón **PROGRAM** conjuntamente con el botón **SHIFT**; las pistas que componen el programa serán indicadas en el orden programado.

**Per controllare i dettagli di un programma...**  
Premere il tasto **PROGRAM** mentre si tiene premuto il tasto **SHIFT**; i brani programmati vengono visualizzati nell'ordine programmato.

Track number  
Número de pista  
Numero di brano

Program order number  
Número de orden de programa  
Numero ordine programma

**To clear the programmed tracks...**  
Press the **■/CLEAR** button before playing a CD. During programmed play, press this button twice. When the CD holder is opened, programmed tracks are cleared automatically.

**Para borrar las pistas programadas...**  
Presione el botón **■/CLEAR** antes de reproducir el CD. Durante la reproducción programada, presione este botón dos veces. Cuando se abre el compartimiento del CD, las pistas programadas se borran automáticamente.

**Per cancellare i brani programmati...**  
Premere il tasto **■/CLEAR** prima di riprodurre un CD. Durante la riproduzione programmata, premere questo tasto due volte. Quando il piatto del CD viene aperto, i brani programmati vengono cancellati automaticamente.

#### Notes:

- If the total playing time of the programmed tracks exceeds 99 minutes 59 seconds, the total playing time indication will go out.
- When programming a track number higher than 21 on a disc containing more than 21 tracks, the total playback time of all the programmed tracks will not be displayed.

#### Repeat play (using the remote control unit)

Press the **REPEAT** button while pressing the **SHIFT** button before or during play. A single track or all the tracks can be repeated.

Whether a single track or all tracks are to be repeated can be specified. Each time the **REPEAT** button is pressed while pressing the **SHIFT** button, the mode will change from a single track (**⇐**), to all the tracks (**⇐ ALL**), to the clear mode, in this order.



- **Single track repeat (⇐)**  
The current or specified track will be played repeatedly.
- **All tracks of one CD repeat (⇐ ALL)**  
All tracks on the current or specified CD will be played repeatedly.

#### Random play (using the remote control unit)

Press the **RANDOM** button while pressing the **SHIFT** button, and all tracks on a CD play once in random order.

#### Notes:

- Si el tiempo total de reproducción de las pistas programadas excede los 99 minutos y 59 segundos, se apagará la indicación de tiempo total de reproducción.
- Cuando se programa un número de pista mayor que 21 en un disco que contiene más de 21 pista, el tiempo de reproducción total de todas las pistas programadas, no es indicado.

#### Repetición de reproducción (utilizando la unidad de control remoto)

Presione el botón **REPEAT** mientras mantiene presionado el botón **SHIFT** antes o durante la reproducción. Es posible repetir una sola o todas las pistas.

Es posible especificar la reproducción de una sola o de todas las pistas. Cada vez que presiona el botón **REPEAT** conjuntamente con el botón **SHIFT**, el modo cambiará de la siguiente manera: una sola pista (**⇐**), a todas las pistas (**⇐ ALL**), al modo de borrado, en este orden.



- **Repetición de una sola pista (⇐)**  
La pista actual o la especificada será reproducida repetidamente.
- **Repetición de todas las pista de un CD (⇐ ALL)**  
Todas las pistas del CD actual o del especificado serán reproducidas repetidamente.

#### Reproducción aleatoria (utilizando la unidad de control remoto)

Para reproducir una vez todas las pistas de un CD aleatoriamente, presione el botón **RANDOM** conjuntamente con el botón **SHIFT**.



#### Notes:

- Se la durata dei brani programmati per la riproduzione supera i 99 minuti e 59 secondi, l'indicazione della durata della riproduzione scompare dal display.
- Se si programma un numero di brano superiore ai 21 su di un disco che contiene oltre 21 brani, la durata totale di tutti i brani non viene visualizzata.

#### Riproduzione ripetuta (utilizzando l'unità di telecomando)

Premere il tasto **REPEAT** mentre si tiene premuto il tasto **SHIFT** prima o durante l'esecuzione. La riproduzione ripetuta può essere eseguita per un brano singolo oppure per tutti i brani.

E' possibile specificare se si desidera la riproduzione ripetuta di un singolo brano oppure di tutti i brani. Ogni volta che il tasto **REPEAT** viene premuto assieme al tasto **SHIFT**, il modo cambia dal modo di ripetizione di un brano (**⇐**), al modo di ripetizione di tutti i brani (**⇐ ALL**) al modo di cancellazione della riproduzione ripetuta, nell'ordine.

Pressione el botón **REPEAT** mientras mantiene presionado el botón **SHIFT** antes o durante la reproducción. Es posible repetir una sola o todas las pistas.

- **Ripetizione di un singolo brano (⇐)**  
Il brano attuale o da voi indicato viene riprodotto più volte.
- **Ripetizione di un intero CD (⇐ ALL)**  
Tutti i brani del CD attuale o programmato vengono riprodotti ripetutamente.

#### Riproduzione casuale (utilizzando l'unità di telecomando)

Premere il tasto **RANDOM** mentre si tiene premuto il tasto **SHIFT** per riprodurre tutti i brani di un CD per una volta in un ordine casuale.

#### HANDLING CASSETTE TAPES

##### Cassette tapes

1. Loose tape may cause trouble. Using a pencil or like object, gently tighten the tape as shown.
2. To prevent recordings from being erased accidentally, remove the tab(s) with a screwdriver, etc. Reseal the slots with adhesive tape to erase and re-record after the tabs have been removed.
3. C-120 cassettes are not recommended because they are prone to malfunction.

##### Cassette loading

1. Press the **EJECT** (▲) button to open the cassette holder.
2. Load a cassette as shown.
3. Close the cassette holder by pressing it gently. Listen for the click indicating that the holder is securely shut.

#### MANIPULACION DE CASSETTES DE CINTA

##### Cassettes de cinta

1. La cinta floja puede causar problemas. Utilice un lápiz o un objeto similar y tensione gentilmente la cinta tal como se muestra.
2. Para evitar borrar grabaciones accidentalmente, extraiga la/s lengüeta/s con un destornillador, etc. Para borrar la cinta después de haber extraído las lengüetas, selle las ranuras con cinta adhesiva.
3. No se recomienda el uso de cassettes C-120 porque tienen tendencia a fallar.

##### Colocación de cassettes

1. Presione el botón **EJECT** (▲) para abrir el portacassette.
2. Extraiga el cassette como se muestra.
3. Cierre el portacassette presionándolo suavemente. Cuando oiga un "click" esto indica que el portacassette está correctamente cerrado.

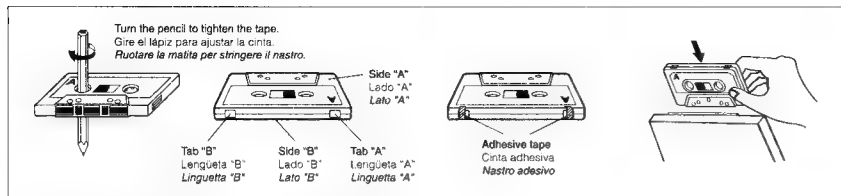
#### MANEGGIO DEI NASTRI A CASSETTA

##### Nastri a cassetta

1. Nastri allentati possono causare problemi. Eliminare l'allentamento del nastro come illustrato per mezzo di una matita o di un oggetto simile.
2. Per evitare la cancellazione accidentale di registrazioni, rimuovere le linguette con un cacciavite o un oggetto simile. Per cancellare o registrare nuovamente il nastro, coprire i fori con nastro adesivo.
3. Si raccomanda di non utilizzare cassette C-120 in quanto queste possono causare problemi.

##### Inserimento cassette

1. Premere il tasto **EJECT** (▲) per aprire il vano portacassetta.
2. Inserire una cassetta come indicato.
3. Chiudere il vano portacassetta premendo gentilmente su di esso. Accertarsi di udire lo scatto che indica la sua chiusura.



**Note:**  
If the power is switched off while tape is running, it may be impossible to remove the cassette. If this happens, switch the power on again before attempting to remove the cassette.

**Auto tape select mechanism**  
This unit has an Auto Tape Select mechanism which distinguishes between different types of tape using detection holes in the cassette. After the type of tape has been detected, bias and equalization suitable for the tape are set.

- Cassettes with detection holes:  
Metal tape (EQ: 70 µs) ..... Type IV  
CrO<sub>2</sub> (chrome) tape (EQ: 70 µs) ..... Type II
- Cassettes without detection holes:  
Normal tape (EQ: 120 µs) ..... Type I

**Nota:**  
Si se desconecta la alimentación durante el transporte de cinta, puede que sea imposible extraer el cassette. Si ello ocurre, conecte la alimentación otra vez antes de intentar extraer el cassette.

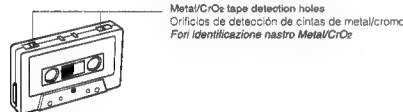
**Mecanismo de selección automática de la cinta**  
Esta unidad posee un mecanismo de selección automática de la cinta que distingue los diferentes tipos de cinta por medio de orificios de detección en el cassette. Después de haber detectado el tipo de cinta, la unidad establece la polarización y equalización adecuadas para la cinta.

- Cassettes con orificios de detección:  
Cinta de metal (EQ: 70 µs) ..... Tipo IV  
Cinta de CrO<sub>2</sub> (cromo) (EQ: 70 µs) ..... Tipo II
- Cassettes sin orificios de detección:  
Cinta normal (EQ: 120 µs) ..... Tipo I

**Nota:**  
Se l'alimentazione viene disattivata durante lo scorrimento del nastro, potrebbe essere impossibile rimuovere la cassetta. Se ciò dovesse accadere, riattivare l'alimentazione prima di riprovare a rimuovere la cassetta.

**Mecanismo per la selezione automatica del tipo di nastro**  
Questa unità possiede un meccanismo per la selezione automatica del tipo di nastro che è in grado di rilevare automaticamente il tipo di nastro utilizzato per mezzo dei fori apposti sulla cassetta. Una volta rilevato il tipo di nastro, la polarizzazione e l'equalizzazione adatte a tale tipo di nastro vengono impostate automaticamente.

- Cassette con fori di identificazione:  
Nastro Metal (EQ: 70 µs) .... Tipo IV  
Nastro CrO<sub>2</sub> (al cromo) (EQ: 70 µs) .... Tipo II
- Cassette senza fori di identificazione:  
Nastro normale (EQ: 120 µs) .... Tipo I



## CASSETTE PLAYBACK



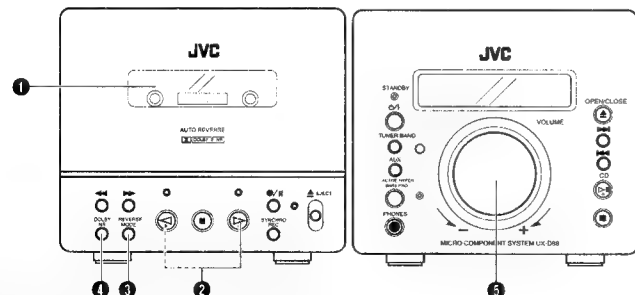
## REPRODUCCION DE CASSETTES

## RIPRODUZIONE DI CASSETTE

Operate in the order shown

Opere en el orden mostrado

Eseguire le operazioni nell'ordine indicato



1. Load a cassette tape with side A facing out.
2. Press to start playback. (The power is switched on and the TAPE mode is engaged to start tape playback.)
3. Select the reverse mode ( / / ).
4. Set the DOLBY NR switch as required.
5. Adjust.

1. Coloque un cassette de cinta con el lado A apuntando hacia afuera.
2. Presione el botón para iniciar la reproducción. (Se conecta la alimentación y se activa el modo TAPE para iniciar la reproducción de la cinta).
3. Seleccione el modo de inversión ( / / ).
4. Coloque el conmutador DOLBY NR como sea necesario.
5. Ajuste.

1. Inserire una cassetta col lato A rivolto all'esterno.
2. Premere il tasto di riproduzione. (L'unità si accende e il modo TAPE viene impostato, attivando il registratore a cassette).
3. Selezionare il modo auto reverse ( / / / ).
4. Portare il selettore DOLBY NR nella posizione adatta.
5. Regolare.

- After loading a cassette tape, simply press the > or < button. The power is switched on and the tape starts playback.

- When the tape plays back with the reverse mode set to (single side play) or (both side play) mode, the tape stops automatically at the end of tape after playing one or both sides. When the reverse mode is set to the (continuous play) mode, the tape continuously plays one side after the other until you stop operation.

- Después de colocar un cassette de cinta, simplemente presione el botón > o <. Se conecta la alimentación y la cinta comienza a ser reproducida.

- La cinta está siendo reproducida en el modo de inversión colocado en el modo (reproducción de un solo lado) o en el modo (reproducción de ambos lados). La cinta se detiene automáticamente al fin de la misma después de la reproducción de uno o ambos lados. Cuando se activa el modo de inversión en el modo (reproducción continuada), la cinta es reproducida continuamente de ambos lados hasta que usted pare la operación.

- Dopo aver inserito una cassetta, premere semplicemente il tasto > o <. L'alimentazione viene attivata e la riproduzione del nastro inizia.

- Quando il nastro viene riprodotto col modo di autoreverse impostato su (reproduzione di un solo lato) o su (reproduzione di entrambi i lati), la riproduzione del nastro si interrompe automaticamente alla fine del nastro dopo aver riprodotto un lato oppure entrambi i lati rispettivamente. Se viene scelto il modo di scorrimento in direzione inversa (reproduzione continua), la riproduzione dei due lati della cassetta continua senza fine sino a che non viene interrotta dall'utente.

## Music Scan

- The beginning of the current tune or the next tune can be located using the music scan function.

- 1 Press the > or < button for tape playback.

- 2 Press the >> or << button for music scan.

## Búsqueda de música

- Utilizando la función de búsqueda de música es posible ubicar el principio de la música actual o de la próxima.

- 1 Para reproducir la cinta presione el botón > o <.

- 2 Para buscar una música presione el botón >> o <<.

## Scansione dei brani

- L'inizio del brano attuale o del brano successivo può venire facilmente localizzato facendo uso di questa conveniente funzione.

- 1 Premere il tasto > o < per dare inizio alla riproduzione.

- 2 Premere il tasto >> o << per dare inizio alla scansione dei brani.

	<ul style="list-style-type: none"> <li>• To the start of the next tune</li> <li>• Hacia el comienzo de la próxima melodía.</li> <li>• Per portarsi all'inizio del brano successivo</li> </ul>	<ul style="list-style-type: none"> <li>• To the start of the tune being played back</li> <li>• Hacia el comienzo de la melodía reproducida.</li> <li>• Per portarsi all'inizio del brano attuale</li> </ul>	The tape direction indicator blinks twice, repeatedly, during music scanning. El indicador de dirección de la cinta parpadeará dos veces, repetidamente, durante la búsqueda de música. L'indicatore della direzione del nastro lampeggia due volte, ripetutamente, durante la scansione musicale.
(Forward (>) direction playback) (Reproducción en la dirección de avance (>)) (Riproduzione in direzione normale (>))			
(Reverse (<) direction playback) (Reproducción en la dirección inversa (<)) (Riproduzione in direzione inversa (<))			

- 3 When the specified tune is located, playback will start automatically.
  - To skip two or more tunes, repeat steps 2 and 3 above.

- 3 La reproducción se inicia automáticamente cuando localiza la canción deseada.
  - Para saltar dos o más músicas repita los pasos 2 y 3 de arriba.

- 3 Trovato il brano cercato, la riproduzione ha inizio automaticamente.
  - Per evitare due o più brani, ripetere le fasi 2 e 3 appena descritte.

**Notes:**  
With the following types of tape, the Music Scan mechanism may not operate correctly. This is not a malfunction; use music scan function only with suitable tapes.

- Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portion during tunes.
- Tapes with short non-recorded sections.
- Tapes with high-level noise or hum between tunes.

**Notes:**  
Con los siguientes tipos de cinta el mecanismo de búsqueda de música puede no funcionar correctamente. Esto no es una falla; utilice la función de búsqueda de música solo con las cintas adecuadas.

- Cintas con músicas que tienen largos pasajes pianissimo (porciones muy suaves), o porciones sin grabar en las músicas.
- Cintas con secciones cortas sin grabar.
- Cintas con alto nivel de ruido o zumbido entre músicas.

**Nota:**  
Con i seguenti tipi di cassetta, la funzione di scansione dei brani potrebbe non funzionare correttamente. Ciò tuttavia non è un guasto. La funzione può venire usata solo con nastri adatti.

- Nastri che contengono porzioni molto silenziose (ad esempio pianissimo di musica classica), o non registrate tra un brano e l'altro.
- Nastri con porzioni non registrate tra un brano e l'altro troppo brevi.
- Nastri che contengono rumore fra un brano e l'altro.

## DOLBY NR system

- Set the DOLBY NR as required. The DOLBY B NR Indicator lights.

**Note:**  
The optimum sound quality will not be obtained if different DOLBY NR switch settings are used during recording and playback.

## Sistema DOLBY NR

- Coloque el DOLBY NR como desee. Se encenderá el Indicador DOLBY B NR.

**Nota:**  
La calidad óptima de sonido no podrá ser obtenida si se utilizan diferentes ajustes de DOLBY NR para la grabación y para la reproducción.

## Sistema DOLBY NR

- Impostare il modo DOLBY NR come desiderato. L'indicatore DOLBY B NR si accende.

**Nota:**  
Se nel corso della riproduzione viene usato un modo DOLBY NR diverso da quello usato per la registrazione, il suono ottenuto non sarà normale.

## RADIO RECEPTION

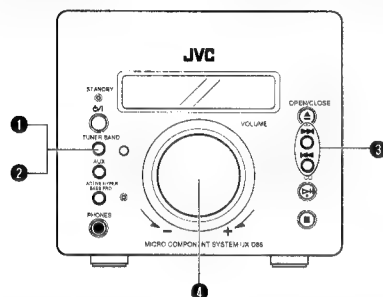
## RADIORECEPCION

## RICEZIONE CON LA RADIO

Operate in the order shown

Opere in l'ordine mostrato

Esegui le operazioni nell'ordine indicato



- Press the TUNER/BAND button.
  - The power is switched on and a band and radio frequency will be shown in the display.
- Select the band.
- Tune to the required station.
- Adjust.

## FM MODE button (using the remote control unit)

**Auto mode:**  
Set to this position when listening to or recording an FM stereo broadcast. The STEREO indicator lights when the FM stereo broadcast is received.

**MONO:**  
Set to this position when FM stereo reception is noisy.  
When another station is tuned to in the MONO mode, the unit automatically enters Auto mode.

- Seek tuning**  
Press the ◀◀ or ▶▶ button for one second or more. The unit enters the seek tuning mode to tune in the nearest station automatically, so the broadcast can be heard. In AM operation, the frequency moves continuously from the MW to the LW band and vice versa.

- Manual tuning**  
Each time the ◀◀ or ▶▶ button is pressed, the unit steps through the current frequency band. Tuning is done in steps of 50 kHz for FM and 9 kHz for AM (MW/LW).  
In AM operation, the tuned frequency moves continuously from the MW (522-1 629 kHz) to the LW (144-288 kHz) band and vice versa.

Press to move to lower frequencies.  
Presione para disminuir la frecuencia.  
Presser pour diminuer la fréquence.



Press to move to higher frequency.  
Presione para aumentar la frecuencia.  
Presser pour augmenter la fréquence.

## Notes:

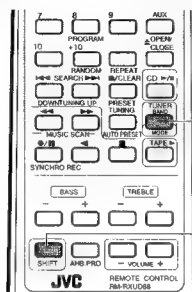
- When seek tuning to the required station is not possible because the broadcast signal is too weak, press the ◀◀ or ▶▶ button momentarily to perform manual tuning.
- When the power is set to STANDBY, or another mode (TAPE, CD or AUX), the last tuned frequency is stored in memory. When the power is switched on again and TUNER/BAND button is pressed, the same station will be tuned to.

## Notas:

- Quando la búsqueda de sintonía de la estación deseada no es posible porque la señal de radiodifusión es demasiado débil, presione el botón ◀◀ o ▶▶ por un momento para efectuar la sintonización manual.
- Quando se coloca la alimentación en STANDBY, u otro modo (TAPE, CD o AUX), la última frecuencia sintonizada queda almacenada en memoria. Cuando conecta la alimentación otra vez y presiona el botón TUNER/BAND, la unidad sintoniza la misma estación.

## Note:

- Quando la sintonizzazione con ricerca della stazione desiderata non è possibile in quanto il segnale trasmesso è troppo debole, premere leggermente il tasto ◀◀ o ▶▶ per eseguire la sintonizzazione manuale.
- Quando l'alimentazione si trova nel modo STANDBY, oppure quando viene selezionato un altro modo (TAPE, CD o AUX), l'ultima frequenza sintonizzata viene memorizzata. Quando l'alimentazione viene riattivata e si preme il tasto TUNER/BAND, l'unità si sintonizza su quella stessa frequenza.



FM MODE button  
Botón FM MODE  
Tasto FM MODE

- Premere il tasto TUNER/BAND.
  - Il sistema si accende e sul display viene visualizzata la banda e la frequenza.
- Selezionare la banda.
- Sintonizzare la stazione desiderata.
- Regolare.

## Tasto FM MODE (utilizzando l'unità di telecomando)

**Modo auto:**  
Impostare questa posizione quando si ascolta o si registra una trasmissione FM stereo. L'indicatore del modo STEREO si accende quando la trasmissione ricevuta è in stereo.

**MONO:**  
Impostare questa posizione quando la ricezione FM è disturbata.  
Quando un'altra stazione viene sintonizzata nel modo MONO, l'unità entra automaticamente nel modo automatico.

- Sintonizzazione con ricerca**  
Premere il tasto ◀◀ o ▶▶ per un secondo o più. L'unità entra nel modo di sintonizzazione con ricerca per sintonizzarsi automaticamente sulla stazione più vicina in modo da poter udire la trasmissione. Durante il funzionamento in AM, la frequenza passa continuamente dalla banda MW a quella LW e viceversa.

- Sintonizzazione manuale**  
Ogni volta che si preme il tasto ◀◀ o ▶▶ viene premuto, la frequenza cambia all'interno della banda corrente. La sintonizzazione viene eseguita in passi da 50 kHz in FM e 9 kHz in AM (MW/LW).  
Durante il funzionamento in AM, la frequenza sintonizzata passa continuamente dalla banda MW (522-1 629 kHz) alla banda LW (144-288 kHz) e viceversa.

## Auto preset tuning (using the remote control unit)

This function scans the current band, detecting frequencies used to broadcast signals, and stores the first 30 FM frequencies and 15 AM (MW/LW) frequencies in memory automatically.

- Press the AUTO PRESET button while pressing the SHIFT button. The frequencies of stations broadcasting signals can be stored in memory automatically in the order of increasing frequency. (30 stations in FM band and 15 stations in AM (MW/LW) band).

## Presintonización automática (utilizando la unidad de control remoto)

Esta función busca la banda actual, detectando frecuencias usadas para señales de radiodifusión y almacena las primeras 30 frecuencias de FM y 15 frecuencias de AM (OM/LW) en memoria automáticamente.

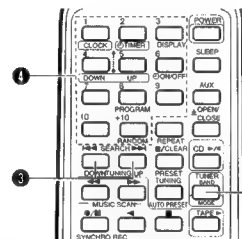
- Presione el botón AUTO PRESET conjuntamente con el botón SHIFT. Las frecuencias de las emisoras emitiendo señales de radiodifusión pueden ser almacenadas en memoria automáticamente en orden de frecuencia creciente. (30 estaciones en la banda de FM y 15 estaciones en la banda de AM (OM/LW)).



## Presetting stations (using the remote control unit)

30 stations in FM band and 15 stations in AM (MW/LW) band can be preset as follows:

- Example: (Presetting an FM station broadcasting on 103.5 MHz to preset button "15")



- Press the TUNER/BAND button.
- Select the FM band using the TUNER/BAND button.
- Tune to the required station.
- Press preset button "+10", then "5" for more than 2 sec. (When "15" blinks in the preset station display, the station has been stored.)

- Repeat the above procedure for each of the other stations, using a different preset button each time.
- Repeat the above procedure for the other band.

- To change preset stations**  
Perform step ① above after tuning to the required station.

## Notes:

- The previous stored station is erased when a new station is stored, because the new station's frequency replaces the previous frequency in memory.
- When listening to an AM (MW/LW) broadcast, noise may be heard if the remote control unit is used.

## Presintonización de estaciones (utilizando la unidad de control remoto)

Es posible presintonizar 30 estaciones en la banda de FM y 15 estaciones en la banda de AM (OM/LW) de la siguiente forma:

- Ejemplo: (Presintonización de la radiomisión de una estación de FM en 103.5 MHz en el botón "15" de presintonización)



- Presione el botón TUNER/BAND.
- Selecione la banda de FM utilizando el botón TUNER/BAND.
- Sintonice la estación deseada.
- Presione el botón "+10" de presintonización y luego el "5" durante más de 2 segundos. (Cuando el "15" parpadea en la indicación de estación presintonizada, ésta ha sido registrada).

- Repita el procedimiento de arriba para cada una de las otras estaciones, utilizando un botón de presintonización diferente para cada estación.
- Repita el procedimiento de arriba para la otra banda.

- Cambio de estaciones presintonizadas**  
Ejecute el paso ① de arriba después de sintonizar la estación deseada.

## Notes:

- La estación previamente almacenada se borra cuando se almacena otra estación, ya que la frecuencia de la nueva estación reemplaza la frecuencia anterior en memoria.
- Cuando escucha una radiodifusión de AM (OM/LW), es posible que se escuche ruido si se utiliza la unidad de control remoto.

## Sintonizzazione con preselezione automatica (utilizzando l'unità di telecomando)

Questa funzione esegue la scansione della banda attuale, rilevando così le frequenze utilizzate per la trasmissione dei segnali, e memorizza automaticamente le prime 30 frequenze FM e le prime 15 frequenze AM (MW/LW).

- Premere il tasto AUTO PRESET mentre si tiene premuto il tasto SHIFT. Le frequenze delle stazioni che trasmettono dei segnali possono essere memorizzate automaticamente in ordine crescente. (30 stazioni per la banda FM e 15 stazioni per la banda AM (MW/LW)).

## Preselezione delle stazioni (utilizzando l'unità di telecomando)

30 stazioni per la banda FM e 15 stazioni per la banda AM (MW/LW) possono essere preselezionate nel modo seguente:

- Esempio: (per preselezionare una stazione FM che trasmette sul 103.5 MHz nel tasto di preselezione numero "15").

- Premere il tasto TUNER/BAND.
- Selezionare la banda FM utilizzando il tasto TUNER/BAND.
- Sintonizzare la stazione desiderata.
- Premere il tasto di preselezione "+10" e quindi quello "5" per oltre 2 secondi. (Quando la cifra "15" lampeggia sul display di preselezione, la stazione è preselezionata).

- Ripetere la procedura sopraindicata per ciascuna stazione desiderata utilizzando ogni volta un tasto di preselezione diverso.
- Ripetere la procedura sopradescritta per l'altra banda.

- Per cambiare le stazioni preselezionate**  
Esegui la fase ① dopo aver sintonizzato la nuova stazione desiderata.

## Note:

- Quando si memorizza una nuova stazione, la stazione memorizzata in precedenza viene cancellata in quanto la frequenza dell' nuova stazione sostituisce quella memorizzata in precedenza.
- Cuando si ascolta una trasmissione AM (MW/LW) si possono udire dei disturbi se viene utilizzato il telecomando.

• All preset stations will be erased when the power cord is disconnected or a power failure occurs for more than 24 hours. In such cases, store the stations again.

• Todas las estaciones presintonizadas se borran cuando se desconecta el cordón de alimentación u ocurre un corte de energía de más de 24 horas. En tales casos almacene las estaciones otra vez.

• Tutte le stazioni preselezionate vengono cancellate se il cavo di alimentazione viene cancellato oppure se si verifica un'interruzione di corrente per più di 24 ore. In tali casi eseguire nuovamente la memorizzazione delle stazioni.

#### Preset tuning (Using the remote control unit)

- The stations must be preset before this operation can be performed.

- 1 Press the TUNER/BAND button.
- 2 Select the band using the TUNER/BAND button.
- 3 Press the PRESET TUNING button to select the required preset station.  
(or) Press the required preset station buttons (No. 1 - No. 10 and +10).
- The preset station number and frequency corresponding to the button pressed are shown.

#### Using the antennas

**FM:** Connect the provided FM feeder antenna (see page 6).  
**AM (MW/LW):** Adjust the position of AM (MW/LW) loop antenna.

#### Presintonización (Utilizando la unidad de control remoto)

- Las estaciones deben ser presintonizadas antes de que se pueda ejecutar esta operación.

- 1 Presione el botón TUNER/BAND.
- 2 Seleccione la banda utilizando el botón TUNER/BAND.
- 3 Presione el botón PRESET TUNING para seleccionar la estación presintonizada deseada.  
(o) Presione los botones (No. 1 - No. 10 y +10) de la estación presintonizada deseada.
- En el visor aparecen el número de estación presintonizada y la frecuencia correspondiente al botón presionado.

#### Utilización de antenas

**FM:** Conecte la bajada de antena FM suministrada (ver página 6).  
**AM (OM/LW):** Ajuste la posición de la antena de cuadro de AM (OM/LW).

#### Sintonizzazione stazioni preselezionate (Utilizzando l'unità di telecomando)

- Le stazioni devono essere preselezionate prima di poter eseguire questa operazione.

- 1 Premere il tasto TUNER/BAND.
- 2 Selezionare la banda utilizzando il tasto TUNER/BAND.
- 3 Premere il tasto PRESET TUNING per scegliere la stazione preselezionata desiderata.  
(o) Premere il tasto della stazione preselezionata desiderata (No. 1 - No. 10, +10).
- Il numero della stazione preselezionata e la frequenza corrispondenti al tasto premuto vengono visualizzati.

#### Uso delle antenne

**FM:** Collegare l'antenna FM a piallina in dotazione (vedi pag. 6).  
**AM (MW/LW):** Regolare la posizione dell'antenna AM (MW/LW) ad anello.

### RECORDING



- During recording, the ALC (Automatic Level Control) circuit automatically optimizes the recording level, so manual recording level adjustment is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

#### Note:

This unit has recording characteristics suitable for normal and CrO<sub>2</sub> tapes. Normal and CrO<sub>2</sub> tapes have different characteristics from metal tapes.

### GRABACION

- Durante la grabación, el circuito ALC (control automático de nivel), optimiza automáticamente el nivel de grabación, haciendo innecesario el ajuste manual del nivel de grabación.
- Verifique que la lengüeta de seguridad del cassette de cinta no esté rota.

#### Nota:

Esta unidad posee características de grabación adecuadas para cintas normales y de CrO<sub>2</sub>. Las cintas normales y de CrO<sub>2</sub> tienen características diferentes que las cintas de metal.

### REGISTRAZIONE

- Durante la registrazione, il circuito ALC (controllo automatico del livello) ottimizza automaticamente il livello di registrazione rendendo così superflua la regolazione manuale del livello di registrazione stesso.
- Controllare che la linguetta di protezione della registrazione della cassetta non sia stata rimossa.

#### Nota:

Questa unità possiede caratteristiche di registrazione adatte per nastri normali e CrO<sub>2</sub>. I nastri normali e CrO<sub>2</sub> possiedono caratteristiche diverse da quelle dei nastri Metal.

#### Synchronized recording with the CD player

- In this system, the CD player starts play when the cassette deck enters the recording mode.

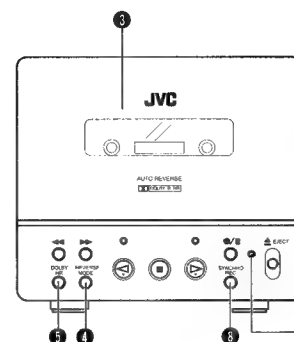
#### Grabación sincronizada con el reproductor de CD

- En este sistema el reproductor de CD inicia la reproducción cuando la pialina de cassette ingresa en el modo de grabación.

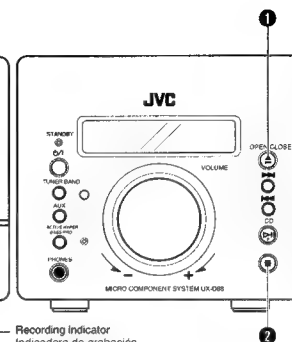
#### Registrazione sincronizzata col lettore CD

- In questo modo di funzionamento, il lettore CD inizia a riprodurre quando il registratore entra nel modo di registrazione.

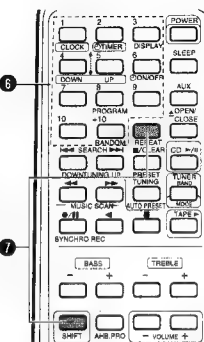
#### Operate in the order shown



#### Opere en el orden mostrado



#### Eseguire le operazioni nell'ordine indicato



- 1 Load a CD and close the CD holder. (The power is switched on.)
- 2 Set to the CD mode.
- 3 Load a cassette with side A facing out. (Wind past the tape leader before starting recording.)
- 4 Select the required reverse mode (↔ or ↔).
- 5 Set the DOLBY NR switch as required.
- 6 When programmed play is required, program the required tracks using the remote control. (See page 19.)
- Select tracks with a total playing time which does not exceed the tape length.
- 7 When recording a CD in repeat play mode, set as required.
- 8 Press the SYNCHRO REC button; (The recording indicator lights up.)

- Recording starts in the forward direction and CD play starts automatically.

- After the CD player has played the entire CD or programmed tracks, the deck stops automatically.
- Non-recorded sections of approx. 4 seconds are automatically left between tunes.
- To stop recording in the middle, press the ■/clear button of the CD player. The cassette deck also stops after 4 seconds.

#### Note:

- During CD synchro recording, the <II> and SEARCH (<I> and <II>) buttons do not function.

#### When non-recorded section between tunes is not required ...

- 1 Press the <II> button of the CD player twice. The CD Player enters the pause mode.
- 2 Press the SYNCHRO REC button to start recording.

#### Note:

- Depending on the CD used, non-recorded sections of different lengths may be left between tunes.

- 1 Coloque un CD y cierre el portadisco. (Se conecta la alimentación).
- 2 Active el modo de CD.
- 3 Coloque un cassette con el lado A apuntando hacia afuera. (Bobine hasta pasar extremo no grabable de la cinta antes de iniciar la grabación).
- 4 Seleccione el modo de inversión deseado (↔ o ↔).
- 5 Coloque el conmutador DOLBY NR como sea necesario.
- 6 Cuando desee la reproducción programada, programe las pistas deseadas utilizando el controlador remoto. (Ver página 19).
- Seleccione las pistas con un tiempo total de reproducción que no exceda la longitud de la cinta.
- 7 Cuando graba un CD en el modo de reproducción repetida, ajuste como sea necesario.
- 8 Presione el botón SYNCHRO REC; se inicia la grabación sincronizada. (Se enciende la luz indicadora de grabación)

- La grabación se inicia hacia adelante y se inicia automáticamente la reproducción del CD.

- Después de que el reproductor de CD termina de reproducir todo el CD o las pistas programadas, la pialina se detiene automáticamente.
- En la cinta quedan automáticamente sin grabar secciones de 4 segundos aprox.
- Para parar la grabación en la mitad, presione el botón ■/parada/borrado del reproductor de CD. La pialina de cassette también para después de transcurridos 4 segundos.

#### Note:

- Durante la grabación sincronizada de CD, los botones <II> y SEARCH (<I> y <II>) no funcionan.

#### Cuando no es necesario dejar espacios sin grabar entre músicas...

- 1 Presione dos veces el botón <II> del reproductor de CD. El reproductor ingresa en el modo de pausa.
- 2 Para iniciar la grabación presione el botón SYNCHRO REC.

#### Note:

- Dependiendo del CD utilizado es posible dejar entre músicas secciones sin grabar de diferentes longitudes.

- 1 Inserire un CD e chiudere il piatto del CD. (L'alimentazione viene attivata).
- 2 Impostare il modo del CD.
- 3 Inserire una cassetta col lato A rivolto all'esterno. (Superare la sezione guida del nastro prima di avviare la registrazione).
- 4 Selezionare il modo autoreverse desiderato (↔ o ↔).
- 5 Portare il selettore DOLBY NR nella posizione adatta.
- 6 Per la riproduzione programmata, programmare i brani richiesti col telecomando. (Consultare a proposito pag. 19.)
- scegliere i brani con un tempo di riproduzione totale che non superi la lunghezza del nastro.
- 7 Per registrare un CD nel modo di ripetizione della riproduzione seguire queste istruzioni.
- 8 Premere il tasto SYNCHRO REC; la registrazione sincronizzata inizia. (L'indicazione di registrazione si illumina).

- La registrazione inizia nella direzione in avanti e la riproduzione del CD inizia automaticamente.

- Dopo che il lettore CD ha riprodotto l'intero CD o i brani programmati, il registratore si ferma automaticamente.
- Degli spazi non registrati da circa 4 secondi vengono creati automaticamente tra i brani.
- Per interrompere la registrazione, premere il tasto arresto/cancellazione (■) del lettore CD. Il registratore a cassette si ferma a sua volta dopo 4 secondi.

#### Note:

- Durante la registrazione sincronizzata, i tasti <II> e SEARCH (<I> e <II>) non funzionano.

#### Quando sezioni non registrate tra i brani non sono necessarie...

- 1 Premere due volte il tasto <II> del lettore CD. Il lettore CD entra nel modo di pausa.
- 2 Premere il tasto SYNCHRO REC per avviare la registrazione.

#### Note:

- A seconda del CD utilizzato, degli spazi non registrati di lunghezza diversa possono essere lasciati tra i brani.

- **CD complete recording function (Synchro recording mode only)**  
If the tape is reversed while a CD is being played, recording will be done on the reverse side of the tape as follows:

- \* When less than 12 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the previous track.
- \* When more than 12 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the current track.

- **To record an entire disc in the track order of the CD**

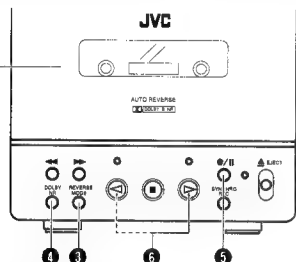
After the operations in steps ①-④ above, press the **▶/II** button of the CD player after the **●/II** and **▶** buttons have been pressed.

- **To record one track**

Play the track to be recorded. Then pressing the **SYNCHRO REC** button locates the beginning of the track and enter the one track recording mode. After the recording is finished, the CD player and cassette deck both stop.

#### Recording from the radio or an external source connected to the AUX terminals

Operate in the order shown



- 1 Load a cassette with side A facing out. (Wind past the tape leader before starting recording.)
- 2 Select the source to be recorded.  
TUNER: Press the TUNER/BAND button.  
Tune to the required station.  
AUX: Press the AUX button.
- 3 Select the required reverse mode (**↔** or **↔**).
- 4 Set the Dolby NR switch as required.
- 5 Press the **●/II** button (recording-pause mode).
- 6 The tape direction indicator blinks.  
The function switch is locked and its position cannot be changed.
- 7 Press to start recording.

- To stop recording temporarily, press the **●/II** button. To resume recording, press the **▶** or **<** button corresponding to the tape direction indicator which is blinking.

- **Función de grabación del CD completo (modo de grabación sincronizada exclusivamente)**

Si la cinta es invertida mientras el CD está siendo reproducido, la grabación se efectuará en el lado opuesto de la cinta, de la siguiente manera:

- \* Cuando se hayan grabado menos de 12 segundos de la última música en el lado frontal de la cinta, la grabación del otro lado se iniciará desde el principio de la pista anterior.
- \* Cuando se hayan grabado más de 12 segundos de la última pista en el lado frontal de la cinta, la grabación del otro lado se iniciará desde el principio de la pista actual.

- **Para grabar todas las canciones en el mismo orden que están en el CD**

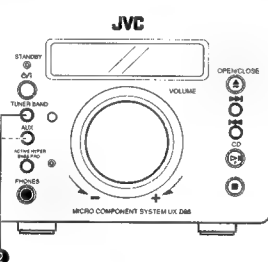
Después de finalizar los procedimientos de los pasos ①-④ mencionados, presione el botón **▶/II** del reproductor de CD luego de presionar los botones **●/II** y **▶**.

- **Grabación de una sólo pista**

Reproduzca la pista a ser grabada. Luego presionando el botón **SYNCHRO REC** ubique el principio de la pista y active el modo de grabación de una sólo pista. Después de terminar la grabación, el reproductor de CD y la platina de cassette paran.

#### Grabación desde la radio o desde una ente externa conectada a los terminales AUX

Opere en el orden mostrado



- 1 Coloque un cassette con el lado A apuntado hacia afuera (Bobine hasta pasar extremo no grabable de la cinta antes de iniciar la grabación).
- 2 Seleccione la fuente a ser grabada.  
TUNER: Presione el botón TUNER/BAND. Sintonice la estación deseada.  
AUX: Presione el botón AUX.
- 3 Seleccione el modo de inversión deseado (**↔** o **↔**).
- 4 Coloque el conmutador Dolby NR como desee.
- 5 Presione el botón **●/II** (modo de pausa de grabación).
- 6 El indicador de la dirección de la cinta parpadeará.  
El conmutador de función queda bloqueado y la posición del mismo no puede ser cambiada.
- 7 Presione para comenzar la grabación.

- Para detener temporariamente la grabación, presione el botón **●/II**. Para continuar con la misma, presione el botón **▶** o **<** correspondiente al indicador de dirección de la cinta que esté destellando.

- **Funzione di registrazione completa del CD (solo nel modo di registrazione sincronizzata)**

Se la direzione del nastro viene invertita durante la riproduzione del CD, la registrazione viene eseguita sul lato opposto nel modo seguente:

- \* Se sono stati registrati meno di 12 secondi dell'ultimo brano sul lato anteriore del brano, la registrazione sul lato opposto del nastro inizierà dall'inizio del brano precedente.
- \* Se sono stati registrati più di 12 secondi dell'ultimo brano sul lato anteriore del brano, la registrazione sul lato opposto del nastro inizierà dall'inizio del brano in corso di riproduzione.

- **Per registrare un intero CD con i brani nel loro ordine originale**

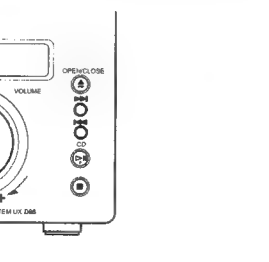
Esegua le operazioni da ① a ④ appena viste, premere il tasto **▶/II** del lettore CD dopo di quello **●/II** e di quello **▶**.

- **Registrazione di un brano**

Riprodurre il brano da registrare, quindi premere il tasto **SYNCHRO REC** per trovare l'inizio del brano e impostare il modo di registrazione di un brano. Terminata la registrazione, il lettore CD ed il registratore a cassette si fermano.

#### Registrazione della radio o del componente collegato ai terminali AUX

Eseguire le operazioni nell'ordine indicato



- 1 Inserire una cassetta col lato A rivolto all'esterno. (Prima di avviare la registrazione, superare la sezione guida del nastro).
- 2 Selezionare la fonte da registrare.  
TUNER: Premere il tasto TUNER/BAND. Sintonizzare la stazione desiderata.  
AUX: Premere il tasto AUX.
- 3 Selezionare il modo autoreverse desiderato (**↔** o **↔**).
- 4 Scegliere il modo Dolby NR desiderato.
- 5 Premere il tasto **●/II** impostando il modo di pausa di registrazione.
  - L'indicatore della direzione di scorrimento del nastro lampeggia.
  - Il selettore di funzione si blocca e la sua posizione non può venire cambiata.
- 6 Dare inizio alla registrazione.

- Per interrompere temporaneamente la registrazione, premere il tasto **●/II**. Per riprenderla, premere il tasto **▶** o **<** corrispondente all'indicatore della direzione di scorrimento del nastro che lampeggia.

#### Erasing

A recorded tape can be erased by recording new material over the previous material.

#### To erase a tape without making a new recording...

Press the **■** (stop) button to set to the TAPE mode, then perform recording. (After pressing the **●/II** button press the **<** or **>** button.)

#### Note:

When erasing a tape, turn the DOLBY NR off.

It may be unlawful to record or playback copyrighted material without the consent of the copyright owner.

#### Borrado

La cinta grabada puede ser borrada grabando otro material sobre el material anterior.

#### Para borrar una cinta sin efectuar una nueva grabación...

Presione el botón **■** (parad) para activar el modo TAPE, luego efectúe la grabación. (Después de presionar el botón **●/II** presione el botón **<** o **>**.)

#### Note:

Cuando borra una cinta, desconecte el DOLBY NR.

Puede ser ilegal el grabar o reproducir material con derechos de autor sin el consentimiento del dueño de los mismos.

#### Cancellazione

Un nastro registrato può essere cancellando eseguendo una nuova registrazione sopra a quella precedente.

#### Per cancellare un nastro senza eseguire una nuova registrazione...

Premere il tasto **■** (arresto) per impostare il modo TAPE e quindi eseguire la registrazione. (Dopo aver premuto il tasto **●/II**, premere quello **<** o quello **>**.)

#### Note:

Disattivare il sistema DOLBY NR quando si cancella un nastro.

Nota che la registrazione o la riproduzione di materiali protetti da diritti d'autore senza il permesso del proprietario di tali diritti potrebbe essere contro la legge.

#### CLOCK ADJUSTMENT

(Using the remote control unit)  
Names of parts in the clock/timer section, and their functions:



- 1 Time display
- 2 Indicator of the mode of timer
- 3 Timer indicator (ON/OFF)
- 4 SLEEP indicator
- 5 CLOCK indicator
- 6 SLEEP button.

Press the following buttons while holding down the SHIFT button

- 1 CLOCK button
- 2 (C) TIMER button
- 3 DOWN/UP buttons
- 4 Timer (C) ON/OFF button

#### AJUSTE DEL RELOJ

(Utilizando la unidad de controlador remoto)  
Nombre de las parte de la sección del reloj/ temporizador y sus funciones:

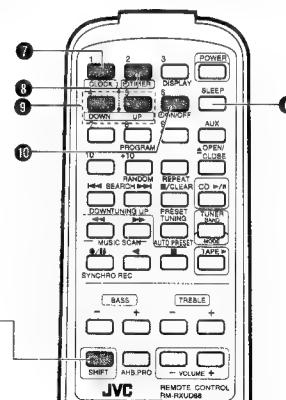
- 1 Indicación de hora
- 2 Indicador del modo de temporizador
- 3 Indicador de activación/desactivación (ON/OFF) del temporizador
- 4 Indicador SLEEP
- 5 Indicador CLOCK
- 6 Botón del temporizador de desconexión (SLEEP)

Presione los siguientes botones mientras mantiene presionado el botón SHIFT.

- 1 Botón del reloj (CLOCK)
- 2 Botones arriba/abajo (DOWN/UP)
- 3 Botón (C) de activación/desactivación (ON/OFF) del temporizador

#### REGOLAZIONE OROLOGIO

(Utilizzando l'unità di telecomando)  
Nome e funzioni delle varie parti dell'orologio e del timer:



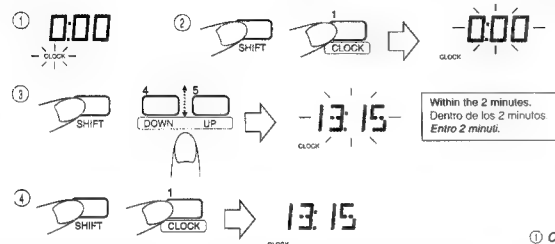
- 1 Display orario
- 2 Indicatore modo timer
- 3 Indicatore timer (ON/OFF)
- 4 Indicatore SLEEP
- 5 Indicatore orologio (CLOCK)
- 6 Tasto spegnimento automatico (SLEEP)

Premere i tasti seguenti mentre si tiene premuto il tasto SHIFT.

- 1 Tasto orologio (CLOCK)
- 2 Tasto timer (C) (TIMER)
- 3 Tasti spostamento basso/alto (DOWN/UP)
- 4 Tasto attivazione/disattivazione timer (C) (ON/OFF)

## Setting the current time (when this unit is used for the first time)

(Example: To set the clock to 13:15.)



- 1 Connect the AC power cord; "CLOCK" will blink in the display.
- 2 Press the CLOCK button while pressing the SHIFT button.
- 3 Set to 13:15 by pressing the UP/DOWN buttons while pressing the SHIFT button. (When the buttons are kept pressed, the minute/hour indication changes continuously.)
- 4 Press the CLOCK button while pressing the SHIFT button.

- To set to the nearest second... Press the CLOCK button while pressing the SHIFT button when you hear the time signal from the TV or radio.

### Notes:

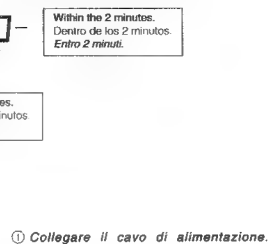
- Before performing timer recording or playback, it is necessary to set the current time.
- It is recommended to set the current time with the  $\odot$ /I button set to STANDBY so that the current display mode is maintained.
- When the power cord is plugged in again after being disconnected or power is restored after a power failure, "CLOCK" will blink in the display. Set the current time again.

## Ajuste de la hora actual (cuando se usa la unidad por primera vez)

(Ejemplo: Para ajustar el reloj a las 13:15)

## Impostazione dell'orario corrente (quando l'unità viene usata per la prima volta)

(Esempio: Per regolare l'orologio sulle 13:15.)



- 1 Collegare il cavo di alimentazione. L'indicazione "CLOCK" lampeggia sul display.
- 2 Premere il tasto CLOCK mentre si tiene premuto il tasto SHIFT.
- 3 Impostare sulle 13:15 premendo i tasti UP/DOWN mentre si tiene premuto il tasto SHIFT. (Quando i tasti vengono tenuti premuti, l'indicazione dei minuti/ore cambia continuamente).
- 4 Premere il tasto CLOCK mentre si tiene premuto il tasto SHIFT.

- predisposizione con precisione al secondo... In concomitanza con un segnale orario dalla televisione o dalla radio, premere il tasto CLOCK mentre si tiene premuto il tasto SHIFT.

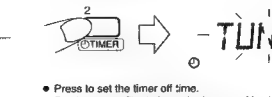
### Notes:

- Prima di eseguire la registrazione o la riproduzione col timer è necessario impostare l'ora esatta.
- Si raccomanda di impostare l'ora esatta col tasto  $\odot$ /I su STANDBY in modo da mantenere il modo di visualizzazione corrente.
- Quando il cavo di alimentazione viene ricollegato dopo essere stato scollegato oppure quando l'alimentazione viene riattivata dopo un'interruzione di corrente, l'indicazione "CLOCK" lampeggia sul display. Impostare nuovamente l'ora esatta.

## Set the stop time. (Example: To set the timer stop time to 13:15.)

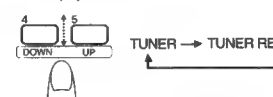


## Ajuste la hora de parada. (Ejemplo: Para ajustar la hora de parada del temporizador a las 13:15)



- Press to set the timer off time.
- Pressione para fijar la hora de desconexión del temporizador
- Premere per impostare l'ora di fine.

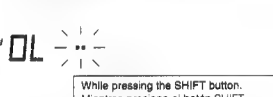
## Select the TIMER mode. The selected timer mode is shown in the display.



## Seleccione el modo TIMER. El modo de temporizador seleccionado aparece en la indicación.



## Selezionare il modo del timer (TIMER). Il modo del timer scelto viene indicato sul display.

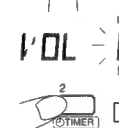
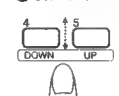


When the UP button is pressed to select the timer mode, the mode changes from TUNER (timer reception of a broadcast), to TUNER/REC (timer recording of a broadcast), to CD (timer play of a CD), to TAPE (timer playback of a tape), in this order.

Si presiona el botón UP para seleccionar el modo de temporizador, el modo cambia de TUNER (recepción de radiodifusión por temporizador), a TUNER/REC (grabación de una radiodifusión por temporizador), a CD (reproducción de CD por temporizador), a TAPE (reproducción de cinta por temporizador), en este orden.

Quando il tasto UP viene premuto per scegliere il modo del timer, il modo di funzionamento cambia in TUNER (ricezione via timer di una trasmissione radio), TUNER/REC (registrazione via timer di una trasmissione radio), CD (riproduzione via timer di un CD) e TAPE (riproduzione via timer di una cassetta) in quest'ordine.

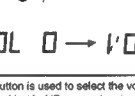
## Set the volume.



- The selected volume is set.
- Se fija el volumen deseado.
- Viene scelto il livello di volume.

- When the volume setting is set to "VOL -" (volume level is not specified), the timer playback volume is at the level used before setting the timer.

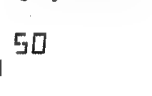
## Ajuste el volumen.



This shows when volume level 1 is selected. Esto se visualizará cuando se seleccione el nivel de volumen 1. Indica se il livello di volume 1 è stato scelto.

- The unit enters the previously engaged mode and timer setting has been completed.
- La unidad ingresa en el modo previamente activado y el ajuste del temporizador queda completado.
- L'unità entra nel modo precedentemente attivato e l'impostazione del timer è così terminata.

## Regolare del volume.



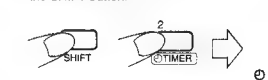
This shows when volume level 1 is selected. Esto se visualizará cuando se seleccione el nivel de volumen 1. Indica se il livello di volume 1 è stato scelto.

- The unit enters the previously engaged mode and timer setting has been completed.
- La unidad ingresa en el modo previamente activado y el ajuste del temporizador queda completado.
- L'unità entra nel modo precedentemente attivato e l'impostazione del timer è così terminata.

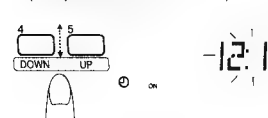
## TIMER OPERATIONS

### (Using the remote control unit) Setting the timer

- The current time must be set before the timer can be used.
- 1 Press the  $\odot$  TIMER button while pressing the SHIFT button.



## Set the start time. (Example: To set the timer to 12:15.)



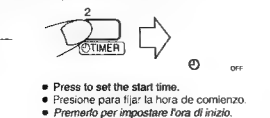
## OPERACIONES POR TEMPORIZADOR

### (Utilizado la unidad de controlador remoto) Ajuste del temporizador

- Antes de utilizar el temporizador es necesario ajustar la hora actual.
- 1 Presione el botón  $\odot$  TIMER conjuntamente con el botón SHIFT.



## Ajuste el tiempo de inicio. (Ejemplo: Para ajustar el temporizador a las 12:15)

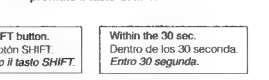


- Press to set the start time.
- Presione para fijar la hora de comienzo.
- Premere per impostare l'ora di inizio.

## FUNZIONAMENTO COL TIMER

### (Utilizzando l'unità di telecomando) Impostazione del timer

- Prima di poter utilizzare il timer deve essere impostata l'ora esatta.
- 1 Premere il tasto  $\odot$  TIMER mentre si tiene premuto il tasto SHIFT.



## Impostare l'orario di avvio. (Esempio: Per impostare il timer sulle 12:15.)

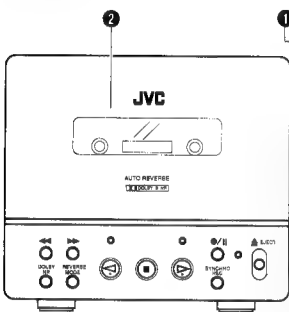


- While pressing the SHIFT button. Mientras presiona el botón SHIFT. Mentre si tiene premuto il tasto SHIFT.

### Timer recording of broadcast

- The current time must be set before the timer can be used.
- Make sure that the safety tabs of the cassette have not been broken off.

#### Operations



- 1 Set the  $\odot/\text{I}$  button to ON.
- 2 Load a cassette.
  - Insert the cassette with the side to be recorded facing out.
  - Set the reverse mode button to "←" or "→" and set the DOLBY NR button as required.
- 3 Set the timer. (Refer to "Setting the timer" on page 29.)
  - Set the timer about a minute before the broadcast to be recorded is scheduled to start.
- 4 Tune to the station to be recorded. (Refer to page 23.)
- 5 Set the  $\odot/\text{I}$  button to STANDBY.

• **Timer recording will start at timer start time and the power will be switched off at timer stop time.** (The timer mode is then released.)

- **To cancel timer operation**  
Press the timer (⊙) ON/OFF button while pressing the SHIFT button so that the timer mode indicator (⊙) goes out.

If you do this, timer recording will not start at the timer start time.

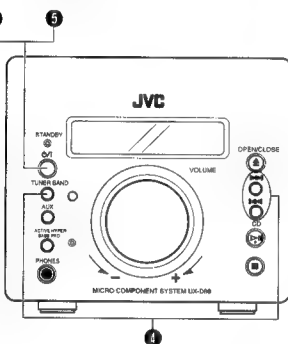
#### Notes:

- Once the timer has been set, the start and stop times, etc., are stored in memory. When timer recording or playback is required at different times, the timer must be set again.
- After setting the timer start and stop times, check that the tuner is tuned to the required frequency.
- When the power cord is disconnected or there is a power failure, timer settings will be erased from memory. If this happens, set the current time and perform the timer setting again.

### Grabación por temporizador de una radiodifusión

- Antes de utilizar el temporizador es necesario ajustar la hora actual.
- Asegúrese de que las lengüetas de seguridad del cassette no estén rotas.

#### Operaciones



- 1 Coloque el botón  $\odot/\text{I}$  en ON.
- 2 Coloque un cassette.
  - Inserte el cassette con el lado a ser grabado apuntando hacia afuera.
  - Coloque el botón de modo de inversión en "←" o en "→" y ajuste el botón DOLBY NR como desee.
- 3 Ajuste el temporizador. (Refiérase a "Ajuste del temporizador" en la página 29.)
  - Ajuste el temporizador a un minuto aproximadamente antes del comienzo programado de la radiodifusión a ser grabada.
- 4 Sintonice la estación a ser grabada. (Refiérase a la página 23.)
- 5 Coloque el botón  $\odot/\text{I}$  en STANDBY.

• **La grabación por temporizador se iniciará en la hora de activación del temporizador y la unidad desconecta la alimentación a la hora de parada del temporizador.** (Luego se desactiva el modo de temporizador.)

- **Cancelación de la operación por temporizador**  
Presione el botón (⊙) ON/OFF al mismo tiempo que presiona el botón SHIFT para borrar el o indicador de modo de temporizador (⊙).

Si usted hace esto, la grabación por temporizador no se iniciará a la hora de activación del temporizador.

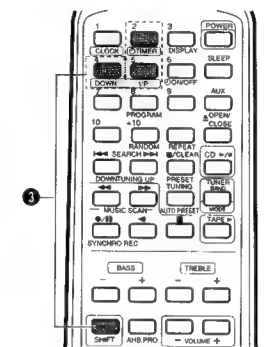
#### Notes:

- Una vez ajustado el temporizador, la hora de activación y desactivación, etc., son registradas en memoria. Cuando se desea efectuar una grabación o reproducción por temporizador a horas diferentes, es necesario ajustar otra vez el temporizador.
- Después de ajustar la hora de activación y desactivación, etc., del temporizador, verifique que el sintonizador esté sintonizado en la frecuencia deseada.
- Si se desconecta el cordón de alimentación o si hay un corte de energía, los ajustes del temporizador se borran de la memoria. Si ocurre esto, ajuste la hora actual y ajuste el temporizador otra vez.

### Registrazione di trasmissioni col timer

- Prima di poter utilizzare il timer deve essere impostata l'ora esatta.
- Accertarsi che le linguette di protezione della registrazione della cassetta non siano state rimosse.

#### Operazioni



- 1 Portare l'interruttore  $\odot/\text{I}$  su ON.
- 2 Inserire una cassetta.
  - Inserire la cassetta col lato da registrare rivolto all'esterno.
  - Impostare il modo autoreverse su "←" o "→" ed il tasto DOLBY NR come necessario.
- 3 Impostare il timer. (Vedi "Impostazione del timer" a pag. 29.)
  - Impostare il timer su circa un minuto prima dell'inizio della trasmissione che si desidera registrare.
- 4 Sintonizzare la stazione che si desidera registrare. (Vedi in proposito pag. 23.)
- 5 Portare l'interruttore  $\odot/\text{I}$  su STANDBY.

• **La registrazione col timer inizia all'orario di avvio e l'alimentazione viene disattivata all'orario di arresto.** (Il modo del timer viene quindi abbandonato).

- **Per cancellare il funzionamento col timer**  
Premere il tasto (⊙) ON/OFF del timer mentre si mantiene premuto SHIFT in modo da far spegnere l'indicatore del modo del timer (⊙).

Se questa operazione viene eseguita, la registrazione col timer non si avvia all'orario di avvio del timer.

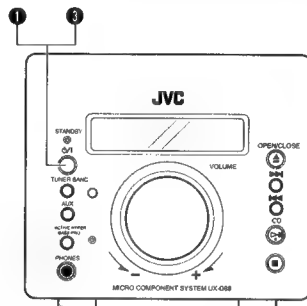
#### Note:

- Una volta che il timer è stato impostato, gli orari di avvio e di arresto, ecc., vengono memorizzati. Quando si desidera eseguire la registrazione o la riproduzione ad un orario diverso, il timer deve essere reimpostato.
- Dopo aver impostato gli orari di avvio e di arresto del timer, controllare che il sintonizzatore sia sintonizzato sulla frequenza desiderata.
- Quando il cavo di alimentazione viene scollegato o si verifica un'interruzione di corrente, le impostazioni del timer vengono cancellate dalla memoria. Se ciò dovesse accadere, impostare l'orario corrente e reimpostare il timer.

### Timer playback

- Timer playback of tapes, broadcasts and CDs is possible.

#### Operations



- 1 Set the  $\odot/\text{I}$  button to ON.
- 2 Set the timer. (Refer to "Setting the timer" on page 29.)

Source sound Fonte di suono Fonte	Timer mode Modo de temporizador Modo di funzionamento	Operations Operaciones Operazioni
CD play Reproducción de CD Riproduzione CD	CD CD CD	Load a disc. Coloque un disco. Inserire un CD.
Tape playback Reproducción de una cinta Riproduzione nastri	TAPE TAPE TAPE	Load a cassette tape. Coloque una cinta de cassette. Caricare una cassetta.
Broadcast Radioemisión Programma radio	TUNER TUNER TUNER	Tune to the required station. Sintonice la estación deseada. Mettere in sintonia la stazione desiderata.

- 1 Set the  $\odot/\text{I}$  button to STANDBY.

- Timer playback will start at the timer start time and the power will be switched off at the timer stop time.  
The unit remains in the same timer mode even after the power is switched off. The same timer function will repeat at the same time on the following day.
- When the power is switched on, it is possible to fade in the sound from volume level 0 (zero) to the preset volume.

- **To cancel timer operation**  
Press the timer (⊙) ON/OFF button while pressing the SHIFT button so that the timer mode indicator (⊙) goes out.

#### Notes:

- When the volume setting is set to "VOL -" (volume level is not specified), the timer playback volume is set to the level used before setting the timer.
- To stop during timer playback, press the  $\odot/\text{I}$  button to switch the unit off.

### Reproducción por temporizador

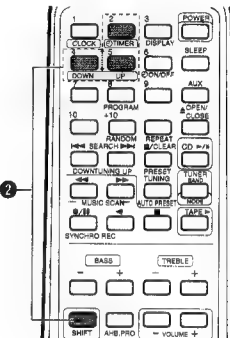
- La reproducción por temporizador de cintas, radiodifusiones, y CD es posible.

#### Operaciones

### Riproduzione col timer

- E' possibile eseguire la riproduzione col timer di nastri, trasmissioni e CD.

#### Operazioni



- 1 Impostare il tasto  $\odot/\text{I}$  su ON.
- 2 Impostare il timer. (Vedi "Impostazione del timer" a pag. 29.)

- 1 Coloque el botón  $\odot/\text{I}$  en ON.
- 2 Ajuste el temporizador. (Refiérase a "Ajuste del temporizador" en la página 29.)

- 1 Coloque el botón  $\odot/\text{I}$  en STANDBY.

- La reproducción por temporizador se iniciará a la hora de activación del temporizador y la alimentación se desconecta a la hora de desactivación del temporizador.  
La unidad permanece en el mismo modo de temporizador aun después de desconectar la alimentación. La misma función de temporización se repetirá a la misma hora el día siguiente.
- Cuando se conecta la alimentación es posible hacer que el sonido aumente gradualmente desde el volumen 0 (cero) al volumen actual.

- **Cancelación de la operación por temporizador**  
Presione el botón (⊙) ON/OFF al mismo tiempo que presiona el botón SHIFT para borrar el o indicador de modo de temporizador (⊙).

#### Notes:

- Cuando se ajusta el volumen en "VOL -" (el nivel de volumen no está especificado), el volumen de reproducción por temporizador permanece en el nivel usado antes del ajuste del temporizador.
- Para parar durante la reproducción por temporizador, presione el botón  $\odot/\text{I}$  para desconectar la unidad.

- 1 Portare l'interruttore  $\odot/\text{I}$  su STANDBY.

- La riproduzione col timer inizia all'orario di avvio del timer mentre l'alimentazione viene disattivata all'orario di arresto.  
L'unità rimane nello stesso modo del timer anche dopo che l'alimentazione viene disattivata. La stessa funzione del timer viene ripetuta alla stessa ora il giorno seguente.
- Quando l'alimentazione viene iniziata, è possibile eseguire un'apertura in dissolvenza dal livello di volume 0 (zero) al livello impostato.

- **Per cancellare il funzionamento col timer**  
Premere il tasto (⊙) ON/OFF del timer mentre si mantiene premuto SHIFT in modo da far spegnere l'indicatore del modo del timer (⊙).

#### Note:

- Quando l'impostazione del volume è "VOL -" (il livello del volume non è stato specificato), il volume della riproduzione col timer viene impostato come prima dell'impostazione del timer.
- Per interrompere il funzionamento durante la riproduzione col timer, premere l'interruttore  $\odot/\text{I}$  per interrompere l'alimentazione.

## Sleep timer operations (using the remote control unit)

### A. Use this when you want to fall asleep while listening to a tape, broadcast or CD.

- Set to the required source and tune (broadcast) or play back (CD or tape).
- Press the SLEEP button to set the sleep time.



**SLEEP** is shown in the display. Se visualiza **SLEEP** en el display. L'indicazione **SLEEP** viene visualizzata sul display.

- Sleep time settings of 30, 60, 90 or 120 minutes can be set. When you release the SLEEP button, the source is displayed after 5 sec.

- The sleep timer operation will start and the power will be switched off after the specified time.
- Checking the sleep time**  
When the SLEEP button is pressed, the remaining sleep time is displayed. If it is pressed again, a new sleep time can be set.
- To cancel the sleep timer operation**  
Press the  $\odot/\text{I}$  button to switch the power off or press the SLEEP button until the sleep time indicator disappears.

### B. To fall asleep while listening to a tape, broadcast or CD and to perform timer playback the following morning

- Set the timer. (Refer to "Setting the timer" on page 29.)
- Set to the required source (broadcast, tape or CD).
- Press the SLEEP button to set the sleep time.



Source mode display (Releasing the sleep mode)  
Visualización del modo de fuente (Cancelación del modo de desconexión)  
Visualizzazione fonte (Abbandono del modo di spegnimento a tempo)

- Any source can be selected for sleep timer operation and timer playback. For example:
  - CD play for sleep timer operation and broadcast reception for timer playback.
  - Tape playback for sleep timer operation and CD play for timer playback.

However, when broadcast reception is selected for both sleep timer operation and timer playback, the station you heard at night will be tuned to the following morning.

## Operación del temporizador de desconexión (utilizando la unidad de control remoto)

### A. Utilice cuando desee dormir mientras escucha una cinta, radiodifusión o CD.

- Ajuste la fuente deseada y sintonice (radiodifusión) o reproduzca (CD o cinta).
- Presione el botón SLEEP para ajustar el tiempo que va a dormir.

- Los ajustes el tiempo para dormir pueden ser 30, 60, 90 o 120 minutos. Cuando usted suelta el botón SLEEP la fuente es indicada después de que hayan transcurrido 5 segundos.

- Después de transcurrido el tiempo especificado se activa el temporizador de desconexión y la alimentación es desconectada.
- Verificación del tiempo para dormir**  
Cuando presiona el botón SLEEP, aparece la indicación del tiempo restante. Si lo presiona otra vez, es posible establecer un nuevo período para dormir.
- Cancelación del temporizador de desconexión**  
Presione el botón  $\odot/\text{I}$  para desconectar la alimentación o presione el botón SLEEP hasta que el indicador del tiempo para dormir desaparezca.

### B. Para dormir mientras escucha una cinta, radiodifusión, o CD y para efectuar la reproducción por temporizador la mañana siguiente

- Ajuste el temporizador. (Refiérase a "Ajuste del temporizador" en la página 29.)
- Ajuste la fuente deseada (radiodifusión, cinta o CD).
- Presione el botón SLEEP para ajustar la hora de desconexión del temporizador.

- Para las operaciones del temporizador de desconexión y para reproducción por temporizador es posible seleccionar cualquier fuente. Por ejemplo:
  - Reproducción de CD para la operación por temporizador de desconexión y recepción de radiodifusión para la reproducción por temporizador.
  - Reproducción de cinta para la operación del temporizador de desconexión y reproducción de CD para la reproducción por temporizador.

Sin embargo, cuando se selecciona la recepción de radiodifusión tanto para el temporizador de desconexión como para la reproducción por temporizador, la estación que usted escucha durante la noche será sintonizada a la mañana siguiente.

## Operazioni per lo spegnimento automatico via timer (utilizzando l'unità di telecomando)

### A. Utilizzare questa funzione per addormentarsi ascoltando un nastro, una trasmissione o un CD.

- Impostare la fonte desiderata e sintonizzarsi (trasmissioni) o riprodurre (CD o nastro).
- Premere il tasto SLEEP per impostare l'orario di spegnimento.

- Lo spegnimento automatico può essere impostato su 30, 60, 90 o 120 minuti. Quando si rilascia il tasto SLEEP, la fonte viene visualizzata 5 secondi dopo.

- Lo spegnimento automatico via timer viene eseguito dopo che il tempo impostato è trascorso.
- Controllo del tempo specificato**  
Quando il tasto SLEEP viene premuto, il tempo rimanente fino allo spegnimento viene visualizzato. Se il tasto viene premuto nuovamente è possibile impostare un nuovo tempo per lo spegnimento automatico via timer.
- Per cancellare lo spegnimento automatico**  
Premere l'interruttore  $\odot/\text{I}$  per spegnere il sistema o premere il tasto SLEEP sino a che l'indicatore dell'ora di spegnimento automatico via timer scompare.

### B. Per addormentarsi ascoltando una trasmissione, un nastro o un CD ed eseguire quindi la riproduzione col timer la mattina successiva

- Impostare il timer. (Vedi "Impostazione del timer" a pag. 29.)
- Impostare la fonte desiderata (trasmissione radio, nastro o CD).
- Premere il tasto SLEEP per impostare il tempo per lo spegnimento automatico via timer.

- Per lo spegnimento automatico e per la riproduzione col timer è possibile selezionare qualsiasi fonte. Per esempio:
  - Riproduzione di un CD per lo spegnimento automatico e ricezione di una trasmissione per la riproduzione col timer.
  - Riproduzione di un nastro per lo spegnimento automatico e riproduzione di un CD per la riproduzione col timer.

Quando si seleziona la ricezione di trasmissioni sia per lo spegnimento automatico che per la riproduzione col timer, comunque, la stazione sintonizzata per lo spegnimento automatico viene sintonizzata anche per la riproduzione col timer.

## MAINTENANCE



### Cleaning is Important!

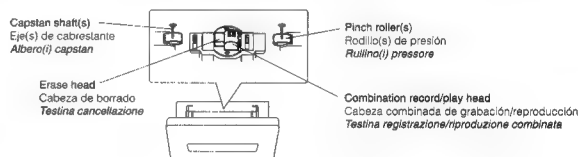
When the tape is running, magnetic powder and dust naturally accumulate on the heads, capstan and pinch roller. When they become too dirty...

- Sound quality deteriorates.
- The output sound level drops.
- Previously recorded tape is not completely erased.
- Recording is not performed satisfactorily.

Therefore, you should clean the heads, etc. after every 10 hours of use for optimal recording conditions.

### Cleaning the heads, capstan and pinch roller

Open the cassette holder.  
Clean the heads, pinch roller and capstan.  
For effective cleaning, use a cleaning kit available from an audio store.  
After cleaning, be sure that the cleaning fluid has dried completely before loading a cassette.



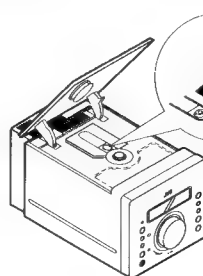
### Caution:

- Keep magnets and metallic objects away from the head.  
If the head becomes magnetized, noise will increase and the sound will deteriorate. Demagnetize the head every 20-30 hours of use with a head eraser (available from an audio store). (When demagnetizing the head, the  $\odot/\text{I}$  button should be set to STANDBY.)
- Do not use anything other than alcohol for cleaning.  
Thinner and benzene will damage the rubber pinch roller.

### Cleaning the lens

If the lens in the CD pickup is dirty, dropout, etc., could degrade sound.  
Open the CD holder and clean the lens as shown.

- Use a blower (available from a camera store) to blow dust off the lens.
- If there are fingerprints, etc. on the lens, gently wipe clean with a cotton swab.



## MANTENIMENTO

### La pulizia è importante!

Quando la cinta está girando, el polvo magnético y el polvo se acumulan naturalmente en las cabezas, cabrestante y rodillo de presión. Cuando están muy sucios...

- La calidad de sonido se deteriora.
- El nivel de salida de sonido se reduce.
- Las cintas grabadas no se borran completamente.
- La grabación no se realiza satisfactoriamente.

Por lo tanto, usted debe limpiar las cabezas, etc. después de cada 10 horas de uso para obtener condiciones de grabación óptimas.

### Limpieza de las cabezas, cabrestante y rodillo de presión

Abra el portacasette.  
Limpie las cabezas, rodillo de presión y cabrestante.  
Para una limpieza efectiva, utilice un conjunto de limpieza disponible en cualquier tienda de audio.  
Después de la limpieza, asegúrese de que el líquido para la misma se haya secado completamente antes de colocar un cassette.

### Precauzioni:

- Mantenga los imanes y los objetos metálicos lejos de la cabeza.  
Si la cabeza se magnetiza, el ruido aumentará y el sonido se deteriorará. Desmagnetice la cabeza cada 20-30 horas de uso con un desmagnetizador de cabezas (disponible en cualquier tienda de audio). (Cuando desmagnetiza la cabeza, el botón  $\odot/\text{I}$  deberá estar colocado en STANDBY.)
- Para limpieza no utilice ningún otro producto que no sea alcohol.  
El diluyente y la bencina dañarán el rodillo de presión de goma.

### Limpieza de la lente

Si la lente del lector de CD está sucia o manchada, etc., puede degradar el sonido.  
Abra el compartimiento del CD y limpie la lente como se muestra.

- Utilice un soplador (disponible en una tienda de cámaras), para quitar el polvo de la lente.
- Si hay huellas digitales, etc. en la lente, limpie suavemente con un isopo de algodón.

## MANUTENZIONE

### La pulizia è estremamente importante!

Quando il nastro scorre, polvere magnetica e sporco si accumulano sulle testine, sui capstan e sui rulli. Quando essi sono troppo sporchi...

- La qualità del suono si deteriora.
- Il livello in uscita cala.
- Registrazioni precedenti non vengono cancellate completamente.
- La registrazione non viene eseguita in modo insoddisfacente.

Le testine, ecc., devono perciò essere pulite ogni 10 ore di uso per mantenere condizioni di funzionamento ottimali.

### Pulizia di testine, capstan e rullini pressori

Aprire il vano della cassette.  
Pulire testine, rullini pressori e capstan.  
Per pulire in modo efficace, utilizzare un corredo di pulizia disponibile presso i negozi specializzati.  
Dopo la pulizia accertarsi che il liquido pulente si sia asciugato completamente prima di inserire una cassette.

### Precauzioni:

- Non avvicinare magneti o oggetti metallici alla testina.  
Se la testina si dovesse magnetizzare, i disturbi aumentano ed il suono si deteriora. Smagnetizzare la testina ogni 20-30 ore di utilizzo con un dispositivo apposito (disponibile presso un negozio specializzato). (Quando si smagnetizza la testina, il tasto  $\odot/\text{I}$  deve essere impostato su STANDBY.)
- Utilizzare solo alcool per la pulizia.  
Diluente o benzina danneggiano la gomma dei rullini pressori.

### Pulizia della lente

Se la lente del pickup del lettore CD è sporca, ecc., la qualità del suono potrebbe degradarsi.  
Aprire il vano del CD e pulire la lente come indicato.

- Utilizzare un soffietto (reperibile in un negozio di materiale fotografico) per soffiare via la polvere dalla lente.
- Se sulla lente vi sono impronte digitali, ecc., pulire con gentilezza utilizzando un bastoncino ovattato.



## TROUBLESHOOTING



What appears to be trouble is not always serious. First make sure....

- Power cannot be turned on.
- Is the power cord unplugged?
- No sound from the speakers.
- Are headphones connected?

## CD Player Section

- The CD player does not play.
- Is the CD upside down?
- Is the CD dirty?
- A certain portion of the CD does not play correctly.
- Is the CD scratched?

## Cassette Deck Section

- Playback sound is at a very low level.
- Is the head dirty?
- The **●/II** button does not function.
- Have the safety tabs of the cassette been broken off?

## Tuner Section

- Reception is noisy.
- Try adjusting the antenna.

## Timer Section

- Timer operation does not start.
- Is the current time set correctly?
- Is the timer mode (D) displayed?

## Remote Control

- Remote control is impossible.
- Are the batteries in the remote control exhausted?
- Is the remote sensor section exposed to bright light (direct sunlight, etc.)?

## Note:

Before making an important recording, be sure to make a test recording first to check that the deck, etc. is working correctly.

## DETECCION DE PROBLEMAS

Lo que parece ser un problema no siempre es grave. Primero asegúrese....

- No es posible conectar la alimentación.
- ¿Está el cordón de alimentación desenchufado?
- No sale sonido de los altavoces.
- ¿Están los audífonos conectados?

## Sección del reproductor de CD

- El reproductor de CD no funciona.
- ¿Está el CD invertido?
- ¿Está el CD sucio?
- Cierta porción de un CD no es correctamente reproducida.
- ¿Está el CD rayado?

## Sección la platina de cassette

- El sonido de reproducción tiene un nivel muy bajo.
- ¿Está la cabeza sucia?
- No funciona ni botón **●/II**.
- ¿Se han extraído las lengüetas de seguridad del cassette?

## Sección del sintonizador

- La recepción es ruidosa.
- Intente ajustar la antena.

## Sección del temporizador

- La operación por temporizador no se activa.
- ¿Está la hora actual correctamente ajustada?
- ¿Está el modo de temporizador (D) indicado?

## Controlador remoto

- El controlador remoto no funciona.
- ¿Están las pilas del controlador remoto agotadas?
- ¿Está la sección sensor remoto expuesta a una luz brillante (luz solar directa, etc.)?

## Note:

Antes de efectuar una grabación importante, asegúrese de hacer una grabación de prueba para verificar que la platina, etc. esté funcionando correctamente.

## DIAGNOSTICA

Quanto sembra essere un problema spesso non è nulla di serio. Accertarsi prima di tutto....

- L'alimentazione non può essere attivata.
- Il cavo di alimentazione è scollegato?
- I diffusori non producono alcun suono.
- Le cuffie sono collegate?

## Sezione lettore CD

- Il lettore CD non riproduce.
- Il CD è rovescio?
- Il CD è sporco?
- Una parte del CD non viene riprodotta correttamente.
- Il CD è graffiato?

## Sezione registratore a cassette

- Il livello del suono riprodotto è molto basso.
- La testina è sporca?
- Il tasto **●/II** non funziona.
- Le linguette di protezione della registrazione della cassette sono state rimosse?

## Sezione sintonizzatore

- La ricezione è disturbata.
- Provare ad orientare l'antenna.

## Sezione timer

- Il funzionamento col timer non si avvia.
- L'orario corrente è impostato in modo corretto?
- Il modo del timer (D) viene visualizzato?

## Telecomando

- Il funzionamento col telecomando è impossibile.
- Le batterie del telecomando sono scariche?
- Il sensore di telecomando è colpito da luce (solare o artificiale) intensa?

## Note:

Prima di eseguire registrazioni importanti, accertarsi di eseguire una registrazione di prova per essere certi che il funzionamento del registratore, ecc., sia corretto.

Frequency response : 40-17,000 Hz (with CrO2 tape)  
Wow & flutter : 0.15% (WRMS)  
Fast wind time : Approx. 130 sec (C-60 cassette)

## Speaker Section (each unit)

Speakers (impedance) : Dual-10 cm (Woofer) (8 Ω), 5 cm (Tweeter) (4 Ω)  
Dimensions : 155 (W) x 258 (H) x 231 (D) mm  
Weight : Approx. 2.8 kg

## General

Power output : 50 W (25 W + 25 W) at 4 Ω (Max.)  
40 W (20 W + 20 W) at 4 Ω (10% THD)

Input terminals : AUX IN (500 mV/56 kΩ)  
Output terminals : PHONES (Output level: 0-10 mV/ch, 32 Ω, Matching impedance: 16 Ω - 1 kΩ)

SPEAKER (Matching impedance: 4 Ω - 16 Ω)  
LINE OUT (500 mV/4.8 kΩ)  
OPTICAL DIGITAL OUT

Power requirements : AC 230 V, 50 Hz  
Power consumption : 48 W (with **●/I** button ON)  
2.5 W (with **●/I** button STANDBY)

Dimensions : 593 (W) x 258 (H) x 274 (D) mm, including knobs

Weight : Approx. 10.2 kg  
Accessories provided : Power cord x 1  
Remote control unit (RM-RXUD88) x 1

"RB/AA (15F)" batteries x 2 (for the remote control)  
FM feeder antenna x 1  
Loop antenna stand x 1  
Speaker cord x 2

Design and specifications are subject to change without notice.

Respuesta de frecuencia : 40-17.000 Hz (con cinta de CrO2)  
Fluctuación y tremolación : 0,15% (WRMS)  
Tiempo de bobinado rápido : 130 seg. aprox. (cassette C-60)

## Sección de altavoces (cada unidad)

Altavoces (impedancia) : Dos altavoces de graves de 10 cm (8 Ω), altavoz de agudos de 5 cm (4 Ω)

Dimensiones : 155 (A) x 258 (Alt.) x 231 (P) mm  
Peso : 2,8 kg aprox.

## Generalidades

Salida de potencia : 50 W (25 W + 25 W) a 4 Ω (máx.)  
40 W (20 W + 20 W) a 4 Ω (10% THD)

Terminales de entrada : AUX IN (500 mV/56 kΩ)

Terminales de salida : Auriculares (PHONES) (Nivel de salida: 0-10 mV/ch, 32 Ω, impedancia de adaptación: 16 Ω - 1 kΩ)

Altavoz (SPEAKER) (impedancia de adaptación: 4 Ω - 16 Ω)  
Salida de línea (LINE OUT) (500 mV/4.8 kΩ)

Salida digital óptica (OPTICAL DIGITAL OUT)

Requisitos de alimentación : 230 V CA, 50 Hz  
Consumo de energía : 48 W (con **●/I** botón en ON)

2,5 W (con **●/I** botón en STANDBY)

Dimensiones : 593 (A) x 258 (Alt.) x 274 (P) mm, incluyendo las

perifías

Peso : 10,2 kg. aprox.

Accesorios suministrados : Cable de corriente alterna x1  
Unidad de control remoto (RM-RXUD88) x 1  
Pilas "RB/AA (15F)" x 2 (para el controlador remoto)

Antena de alimentación FM x 1  
Soporte para la antena de cuadro x 1  
Cordón de altavoz x 2

Diseño y especificaciones sujetos a cambio sin aviso.

**JVC**  
VICTOR COMPANY OF JAPAN, LIMITED

## SPECIFICATIONS

## CD player section

Type : Compact disc player  
Signal detection system : Non-contact optical pickup  
Number of channels : 2 channels  
Frequency response : 20 Hz - 20,000 Hz  
Signal-to-noise ratio : 90 dB  
Wow & flutter : Less than measurable limit

## Radio section

Frequency range : FM 87.5-108 MHz  
AM (MW) 522-1,629 kHz  
AM (LW) 144-288 kHz

## Antennas

Loop antenna for AM (MW/LW)  
External antenna terminal for FM (75 Ω)

## Tape deck section

Track system : 4-track 2-channel stereo  
Motor : Electronic governor DC motor for capstan

## Heads

Hard permalloy head for recording/playback, 2 gap ferrite head for erasure (Combination head)

## ESPECIFICACIONES

## Sección del reproductor de CD

Tipo : Reproductor de discos compactos  
Sistema de detección de señal : lector óptico sin contacto  
Número de canales : 2 canales  
Respuesta de frecuencia : 20 Hz - 20.000 Hz  
Relación señal-ruido : 90 dB  
Fluctuación y tremolación : Menor que el límite medible

## Sección de la radio

Sección de la radio : FM 87.5-108 MHz  
Límites de frecuencia : AM (OM) 522-1.629 kHz  
AM (OL) 144-288 kHz  
Antena : Antena de cuadro para AM (OM/OL)  
Terminal de antena exterior para FM (75 Ω)

## Sección de la platina de cinta

Sistema de pistas : 4 pistas 2 canales estéreo  
Motor : Motor de CC con mandos electrónicos para cabrestante  
Cabezas : Cabeza de aleación dura "permalloy" para grabación/reproducción, cabeza de ferrita de doble entrehierro para borrado (Cabeza combinada)

## DATI TECNICI

## Sezione lettore CD

Tipo : Lettore di CD  
Sistema rilevamento segnale : Pickup ottico senza contatto  
Numero canali : 2 canali  
Risposta frequenza : 20 Hz - 20.000 Hz  
Rapporto segnale/rumore : 90 dB  
Wow e flutter : Meno del limite misurabile

## Sezione radio

Gamma frequenza : FM 87.5-108 MHz  
AM (MW) 522-1.629 kHz  
AM (LW) 144-288 kHz  
Antenna : Antenna ad anello per AM (MW/LW)  
Terminale per antenna FM esterna (75 Ω)

## Sezione registratore

Sistema registrazione : 4 piste, 2 canali stereo  
Motore : Motorino CC controllato elettronicamente per il capstan  
Testina : Testina in permalloy duro per registrazione/riproduzione, testina in ferrite a doppio trafilato per cancellazione (Testina combinata)

## 4. Location of Main Parts

### ■ Deck & Power Supply Unit

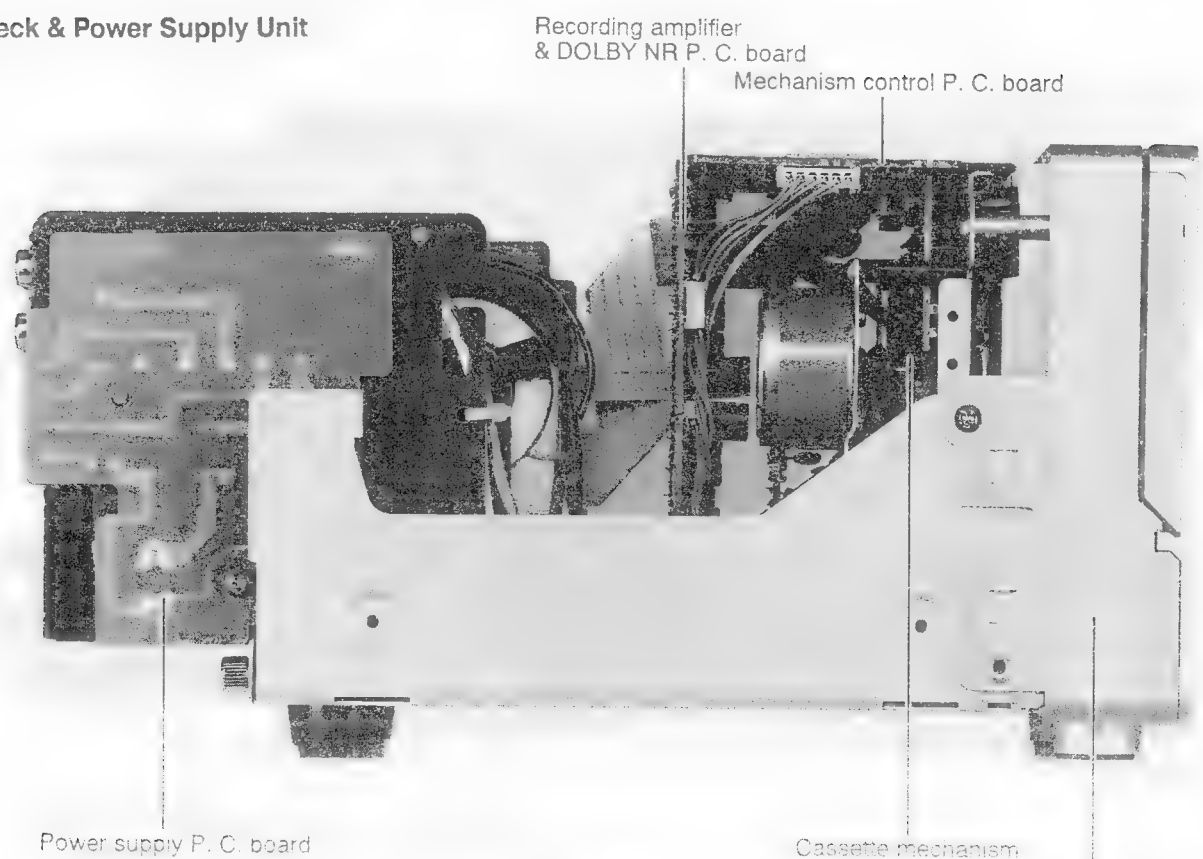


Fig. 4-1

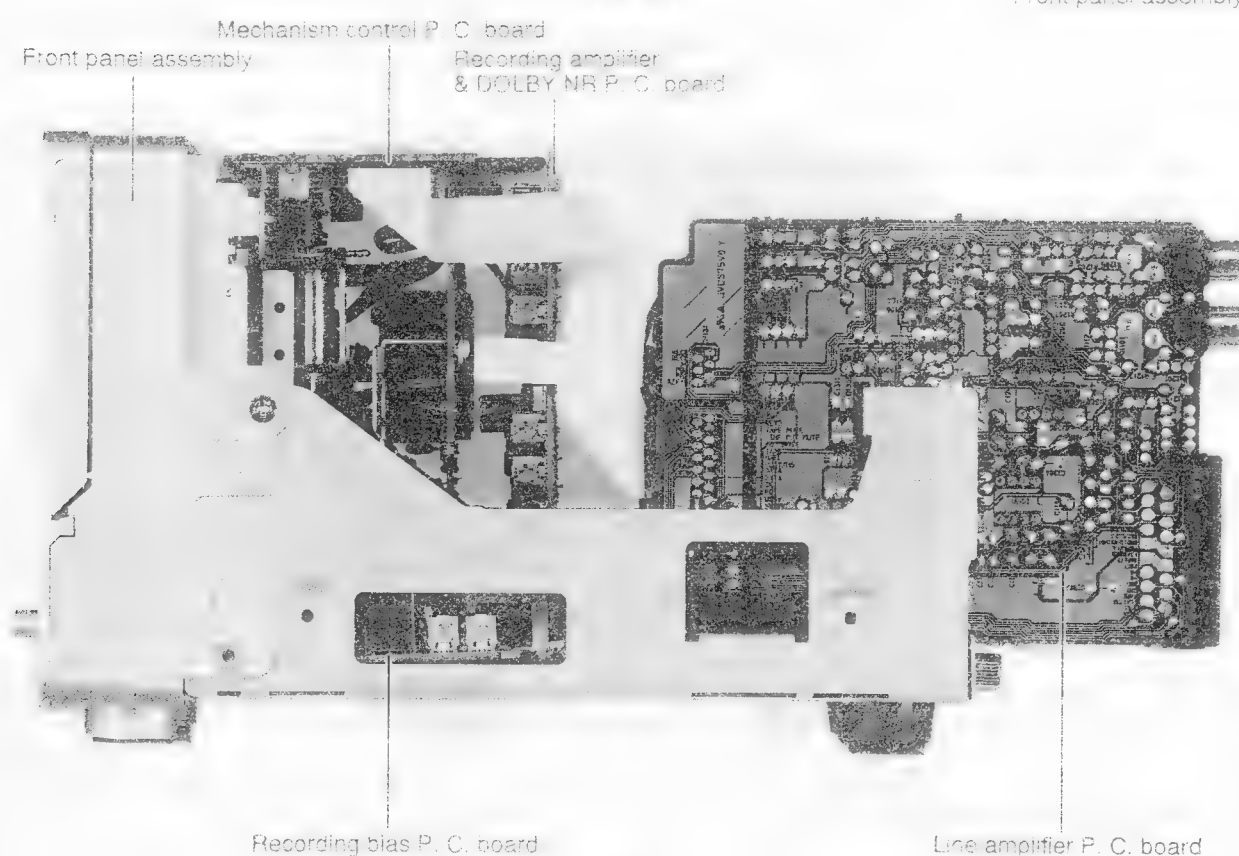


Fig. 4-2

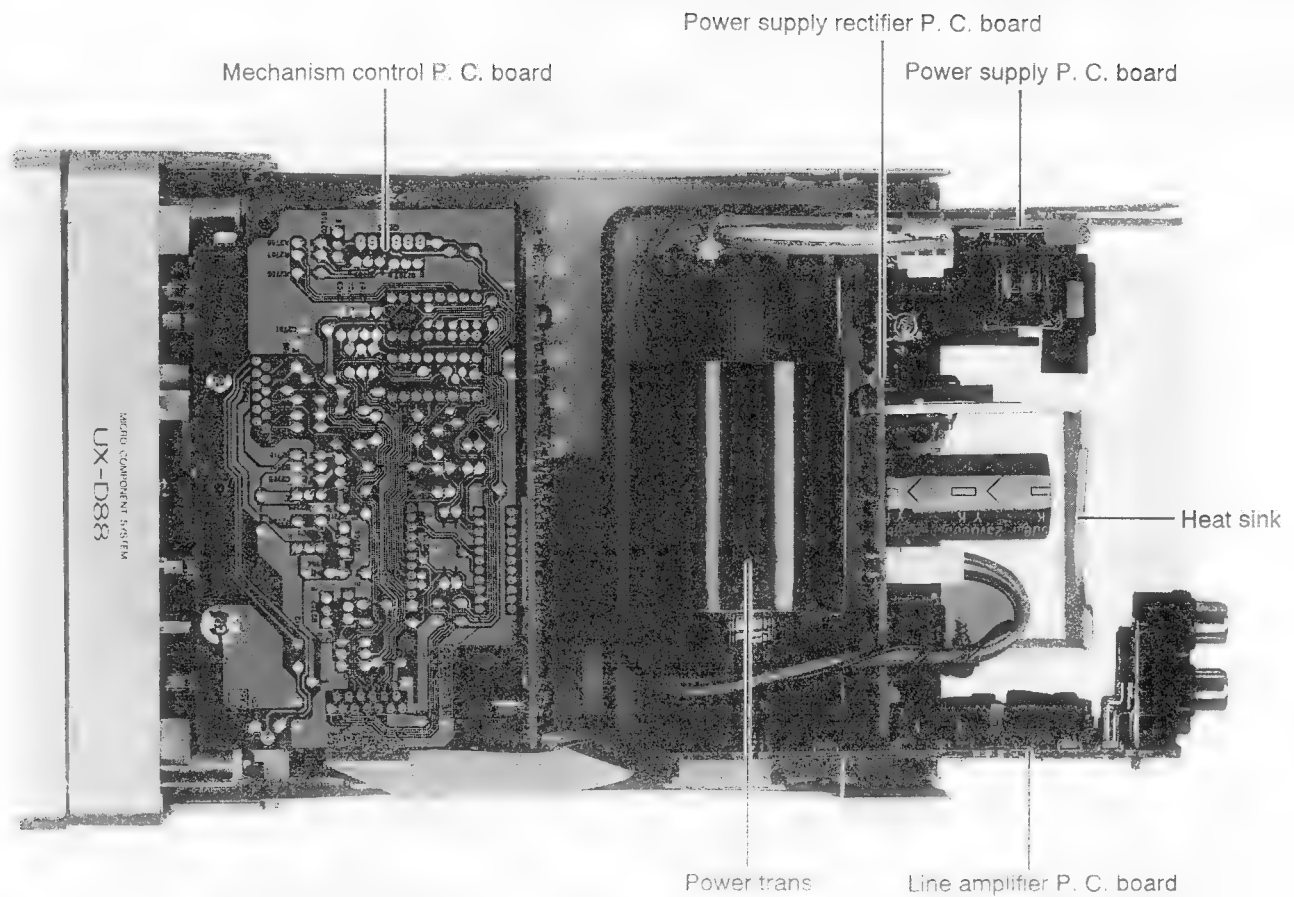


Fig. 4-3

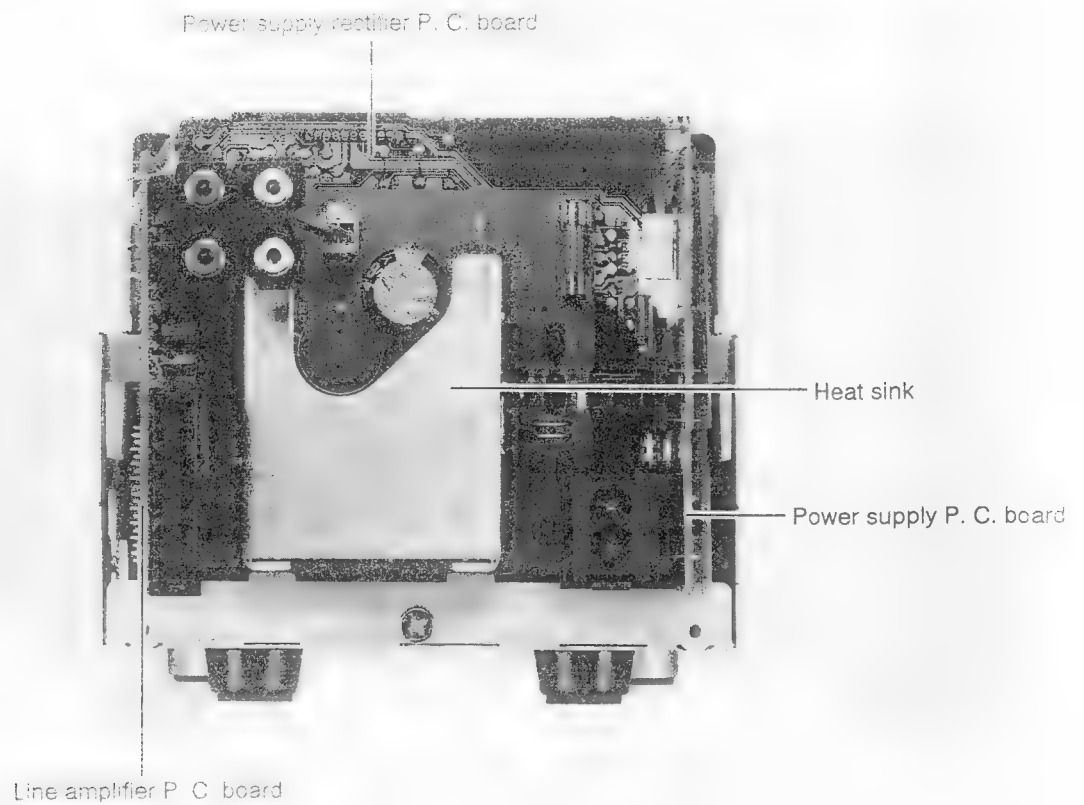


Fig. 4-4

■ CD/ Tuner & Amplifier Unit

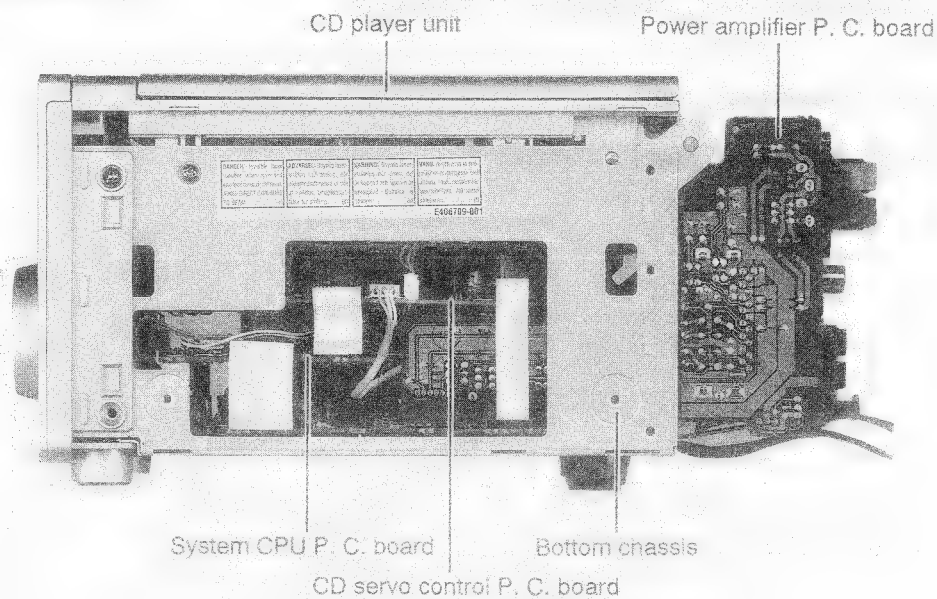


Fig. 4-5

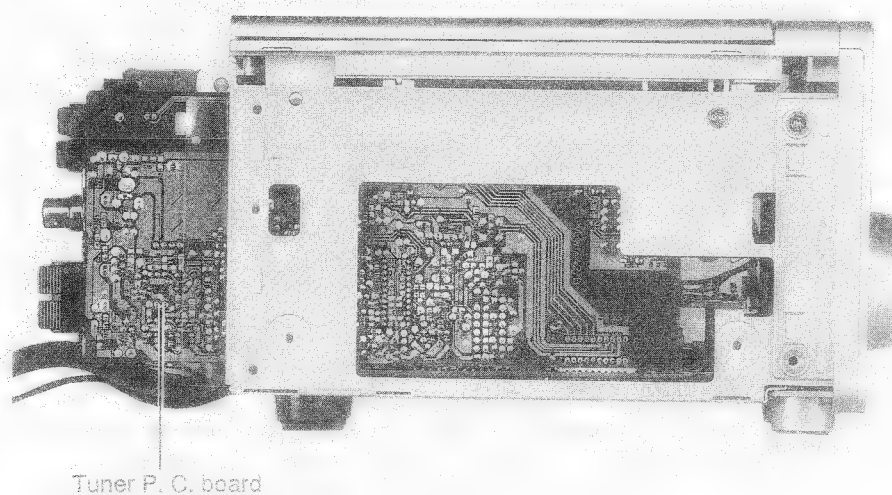


Fig. 4-6

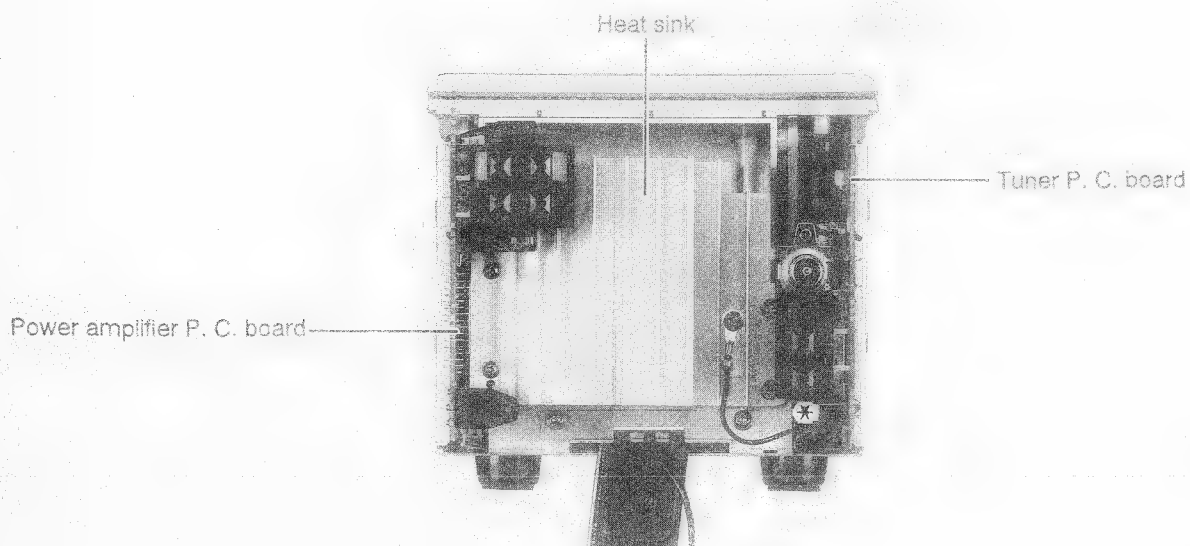


Fig. 4-7

## 5. Removal of Main Parts

### 《Deck and Power Supply Unit》

#### ■ Arrangement and designations of P.C. boards

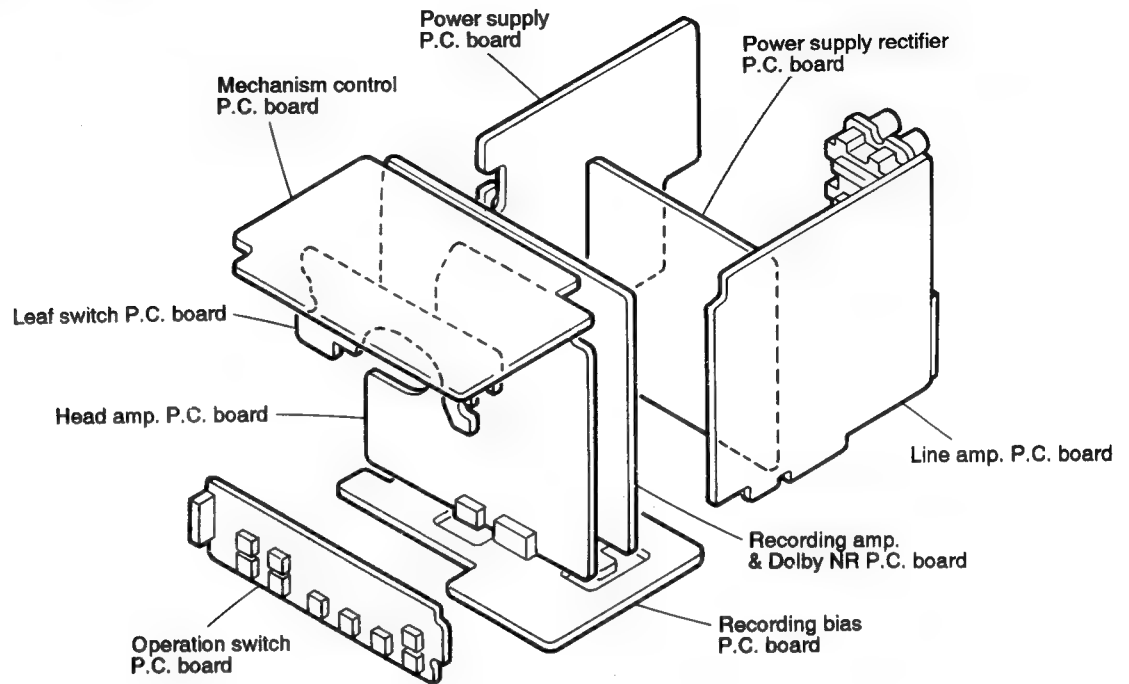


Fig. 5-1

### Armor Section

#### ■ Removing the cassette door cover (See Fig. 5-2)

1. While pressing down the [EJECT] lever, open the cassette door.
2. Remove the door cover while pulling it upward.

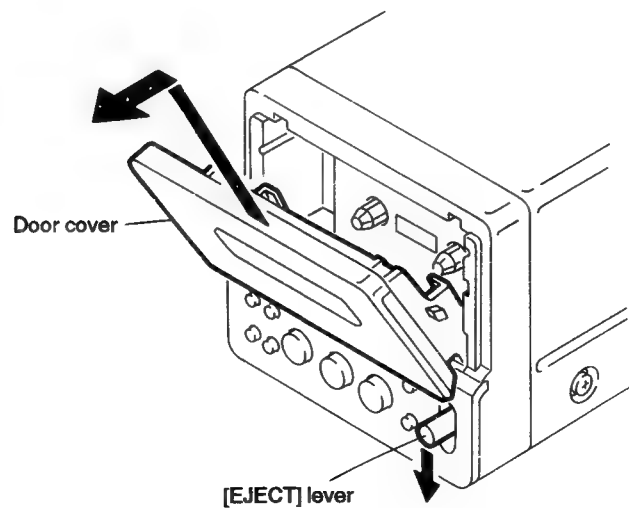


Fig. 5-2

### ■ Removing the front plate (See Figs. 5-3 and 5-4)

1. After turning over the body, remove the two screws ① retaining the front plate (See Fig. 5-3).
2. Open the cassette door, and while disengaging the two engagements ② retaining the front plate in the inner part of the cassette holder, remove the front plate by pulling it toward the front side (See Fig. 5-4).

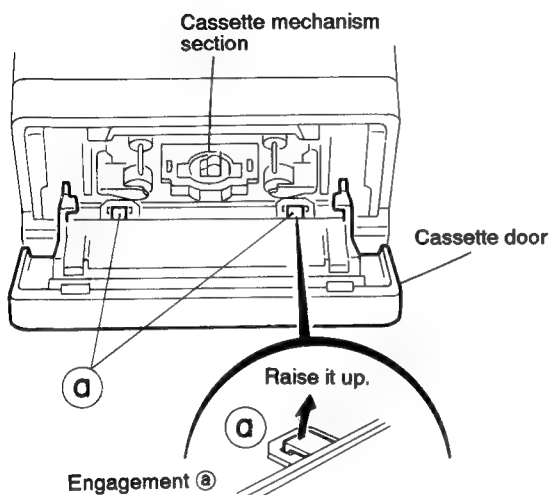


Fig. 5-4

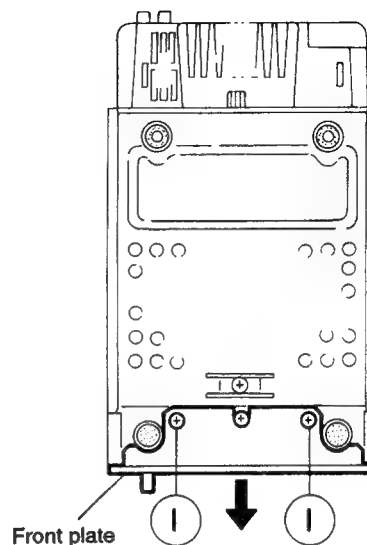


Fig. 5-3

### ■ Removing the top cover (See Figs. 5-5 and 5-6)

1. From both sides of the body, remove the four screws ② retaining the top cover (See Fig. 5-5).
2. From the back of the body, remove the two screws ③ retaining the top cover (See Fig. 5-6).
3. Remove the top cover toward the back of the body.

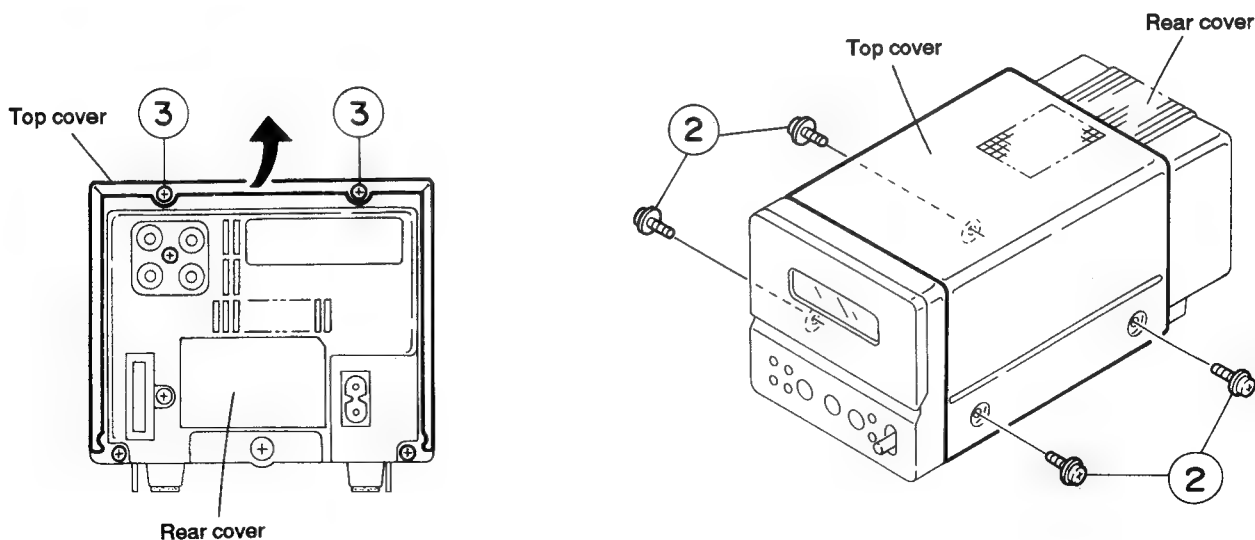


Fig. 5-6

Fig. 5-5

### ■ Removing the rear cover (See Figs. 5-7 and 5-8)

1. From the back of the body, remove the four screws ④ retaining the rear cover.
2. Disengage the two engagements ⑥ on both the right and left sides of the rear cover and chassis.

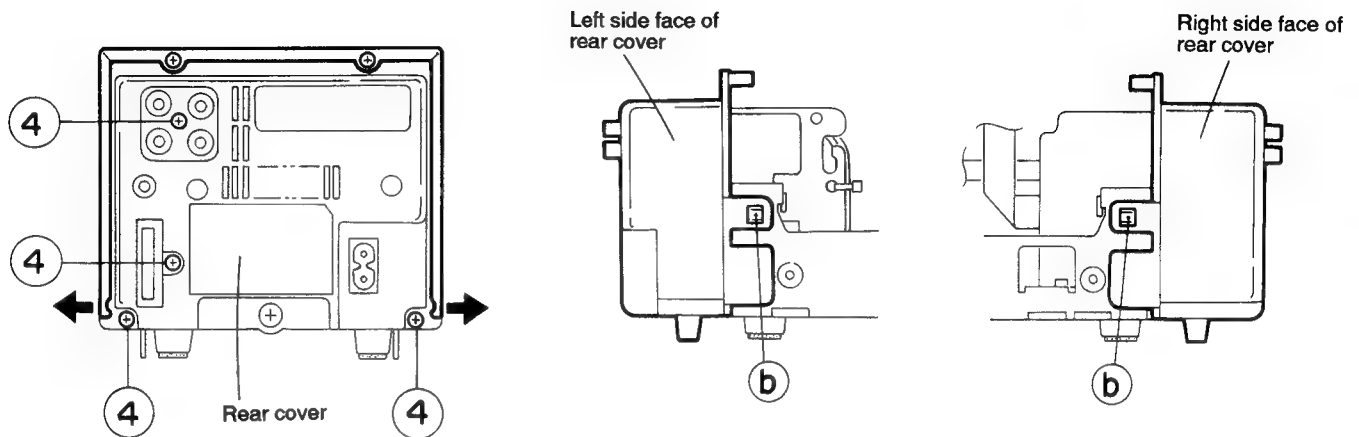


Fig. 5-7

Fig. 5-8

### ■ Removing the front panel assembly

(See Figs. 5-9 and 5-10)

1. Remove the two flat head screws ⑤ retaining the front panel assembly.
2. After turning over the body, remove the one screw ⑥ retaining the front panel assembly.
3. Disengage the four engagements ⑦ between the front panel assembly and chassis.
4. Take out the front panel assembly from the front face of the body.

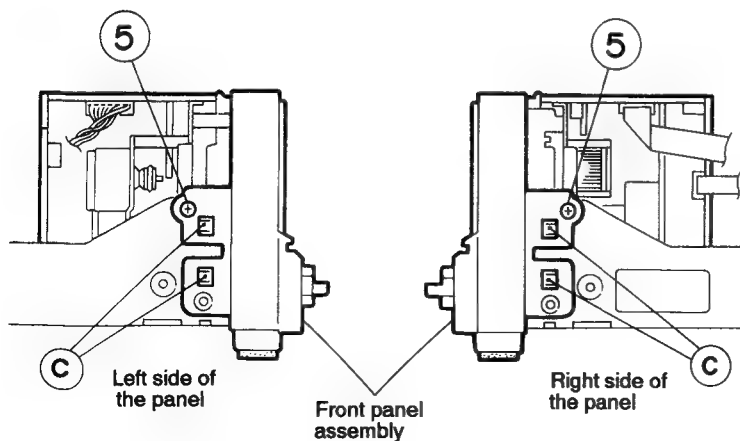


Fig. 5-9

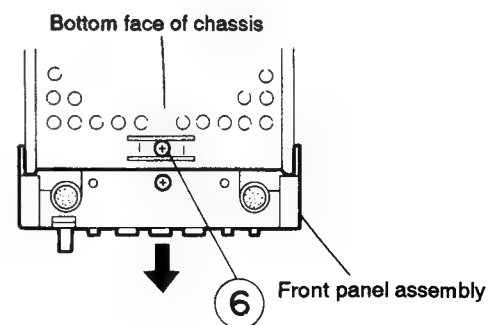


Fig. 5-10

### ■ Removing the cassette mechanism assembly (See Fig. 5-11)

1. Disconnect the connector wire from the connector CN275 on the mechanism control P.C. board.
2. Remove the four screws ⑦ retaining the cassette mechanism assembly.
3. Take out the cassette mechanism assembly from the front face of the body.

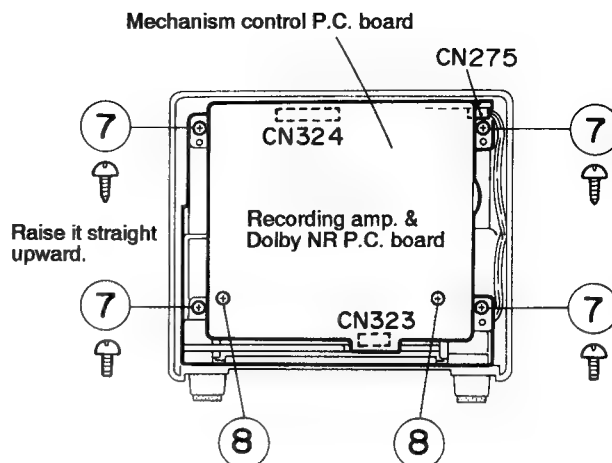


Fig. 5-11

### ■ Removing the recording amp. and Dolby NR P.C. board (See Fig. 5-11)

1. Remove the two screws ⑧ retaining the recording amp. and Dolby NR P.C. board.
2. Remove the recording amp. and Dolby NR P.C. board and disconnect the connectors CN323 and CN324.

### ■ Removing the mechanism control P.C. board (See Fig. 5-12)

1. Remove the recording amp. and Dolby NR P.C. board.
2. Remove the two screws ⑨ retaining the mechanism control P.C. board.
3. While raising the mechanism control P.C. board straight upward, disconnect the connectors CN272 and 273 on the P.C. board.

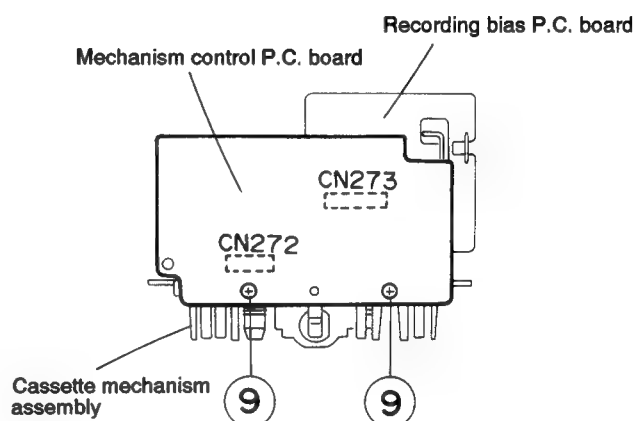


Fig. 5-12

### ■ Removing the head amp. P.C. board (See Figs. 5-13 and 5-14)

1. Remove the recording amp. & Dolby NR P.C. board and mechanism control P.C. board.
2. After removing the FPC holder, disconnect the head flexible wire from the connector CN301 on head amp. P.C. board (See Fig. 5-13).
3. Remove the one screw ⑩ retaining the head amp. P.C. board (See Fig. 5-14).
4. After lowering the head amp. P.C. board in the arrow direction, disengage the engagement ④ and remove the P.C. board (See Fig. 5-14).

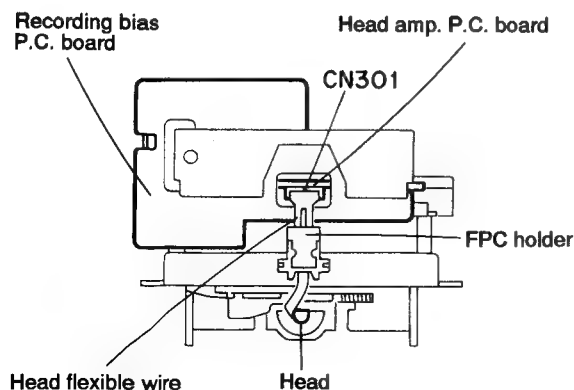


Fig. 5-13

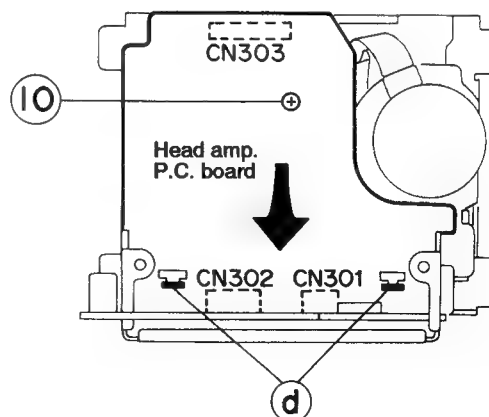


Fig. 5-14

### ■ Removing the front panel (See Figs. 5-15 ~ 5-17)

1. After turning over the body, remove the one screw ⑪ retaining the door holder from the front panel (See Fig. 5-15).
2. Open the door by pressing the [EJECT] button, and pull out the door holder in the arrow direction (See Fig. 5-16).
3. Remove the six screws ⑫ retaining the operation switch P.C. board (See Fig. 5-17).

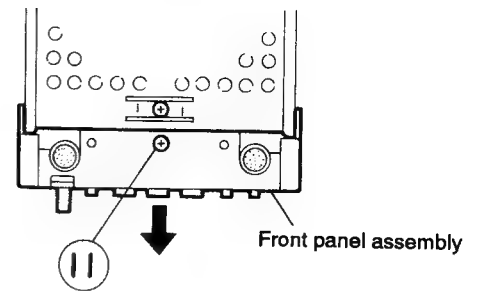


Fig. 5-15

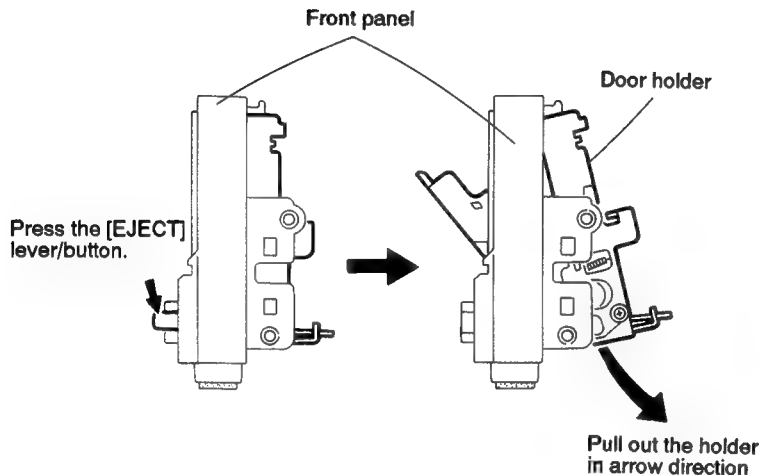


Fig. 5-16

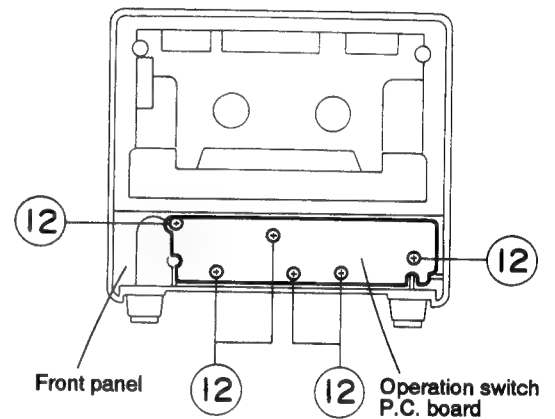


Fig. 5-17

### ■ Removing the line amp. P.C. board and power supply P.C. board (See Fig. 5-18)

1. Remove the two screws ⑬ retaining the heat sink.
2. After raising the line amp. P.C. board, disengage the two engagement ⑥ between the P.C. board and chassis.
3. Remove the one screw ⑭ retaining the AC jack holder.
4. After raising the power supply P.C. board, remove the engagement ⑦ between the P.C. board and chassis.

### ■ Removing the power trans. (See Fig. 5-18)

Remove the four screws ⑮ retaining the power trans.

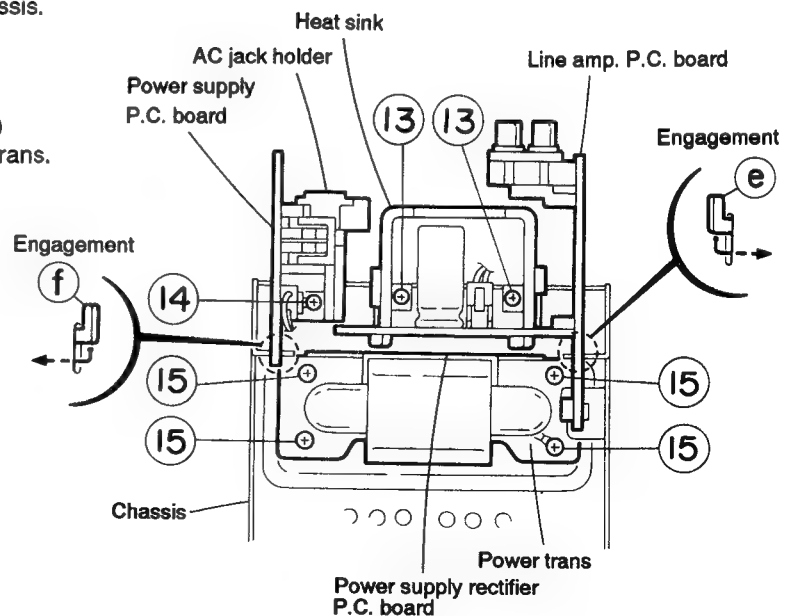


Fig. 5-18

## 《CD/Tuner & Amp. Unit》

### ■ Removing the side panels

(See Figs. 5-19 and 5-20)

Remove the four screws ① retaining both the right and left side panels.

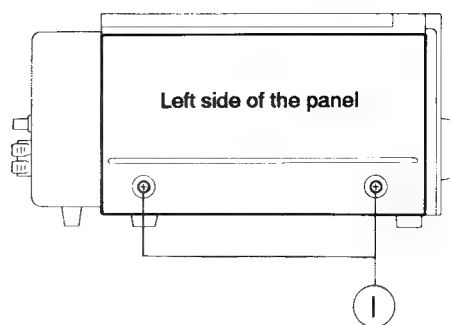


Fig. 5-19

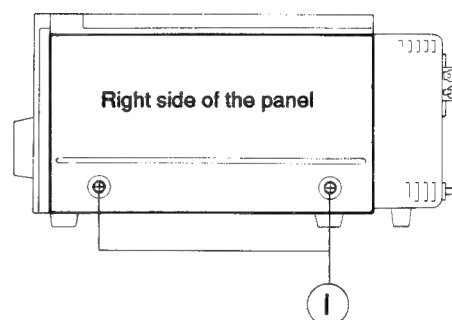


Fig. 5-20

### ■ Removing the rear cover (See Figs. 5-21~5-24)

1. While pressing the four pawls ③ and ④ for the wire holder with screw driver, etc., remove the holder by shifting it in the arrow direction.
2. Remove the two right and left side screws ② retaining the rear cover.
3. From the back face of the body, remove the five screws {③ x 2, ④ x 1 and ⑤ x 2} retaining the rear cover.
4. By disengaging the four engagements {⑥, ⑦, ⑧ and ⑨} between the right and left sides of the rear cover with screw driver, etc., remove the rear cover.

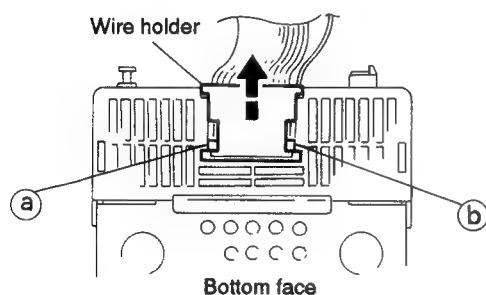


Fig. 5-21

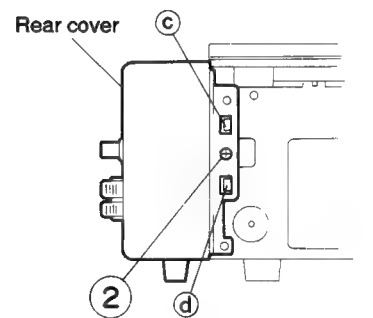


Fig. 5-22

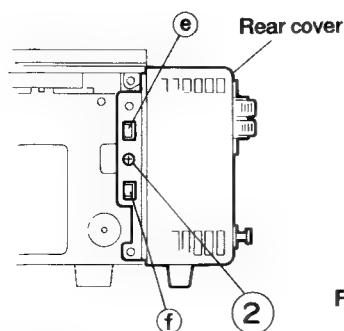


Fig. 5-23

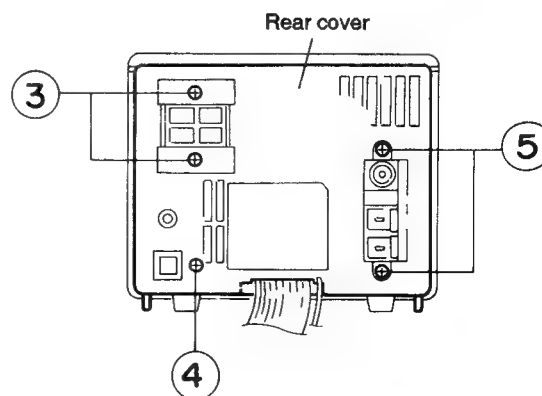


Fig. 5-24

Right side of the rear cover

### ■ Removing the CD player section

(See Figs. 5-25 and 5-26)

1. Remove the two screws ⑥ from the side of the body.
2. From the right side of the body, disconnect the card wires and 3pin connectors respectively from connectors CN602, CN604 and CN605 on the CD servo control P.C. board.
3. While spreading the engagements ⑨ and ⑩ between the right and left side of the CD player section, remove the CD player section upward from the chassis.
4. Disconnect the 4pin connector from the connector CN705 on the system CPU P.C. board (See Fig. 5-25).

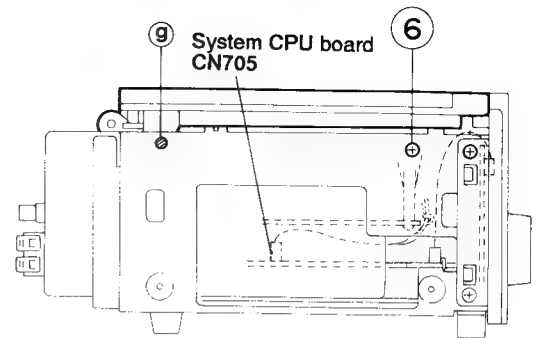


Fig. 5-25

### ■ Removing the front panel assembly

(See Figs. 5-25~5-28)

1. Remove the CD player.
2. Remove the volume control toward the front side so carefully as not cause any damage to the front panel assembly. When it is hard to remove the volume control, pass a string into the clearance between the volume control and front panel assembly, and slowly remove the control while hooking it between the clearance (See Fig. 5-27).
3. Remove the two screws ⑦ from the bottom face of the body (See Fig. 5-28).
4. Remove the two screws ⑧ from the right and left and right side faces of the body (See Fig. 5-27).
5. After disengaging the four engagements ①, ②, ③ and ④ between the front panel assembly and chassis, remove the front panel assembly toward the front side in the arrow direction (See Fig. 5-27).
6. Disconnect the card wires, connectors, etc. from the respective connectors CN602, CN604 and CN605 on the CD amp. P.C. board (See Fig. 5-26).
7. Remove the card wires respectively from the connectors CN701, CN702 and CN703 on the system CPU P.C. board (See Fig. 5-27/5-28).

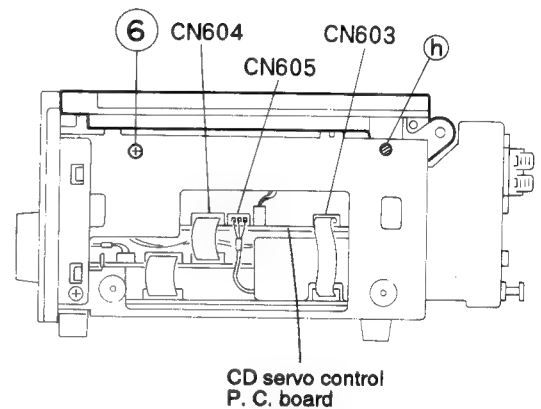


Fig. 5-26

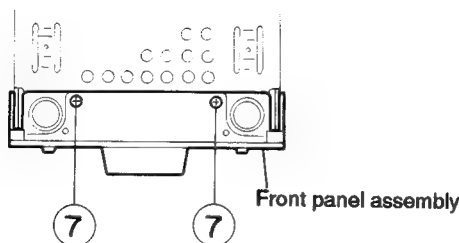


Fig. 5-28

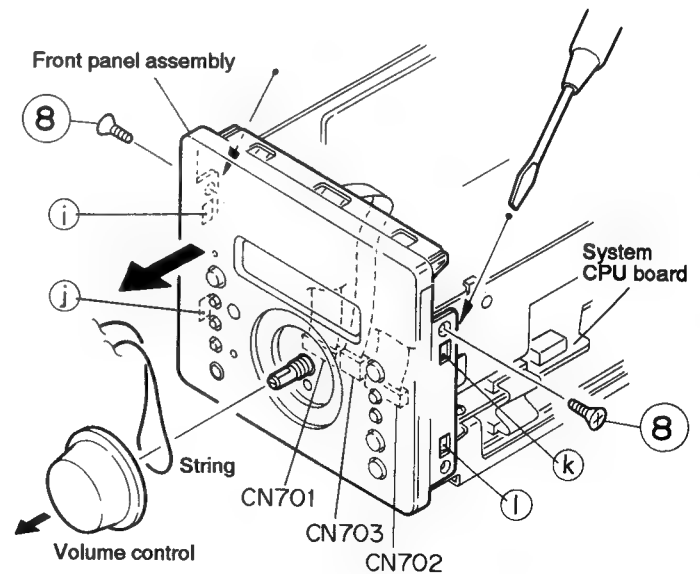


Fig. 5-27

## ■ Removing the front cover

(See Figs. 5-29 and 5-30)

1. While pressing the two engagements ① and ② at the upper part of the front panel, remove the front cover in the arrow direction.

**Caution:** Since the front cover and panel are bonded together with duplicated tape, remove the front cover while peeling off the duplicated tape.

2. From inside the front panel remove the six screws retaining the LCD & control switch P.C. board.

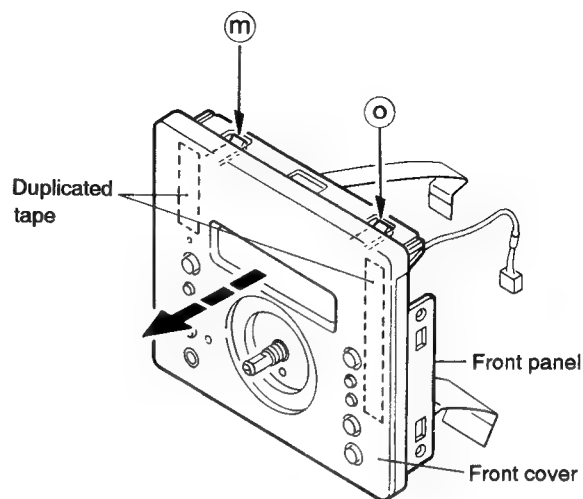


Fig. 5-29

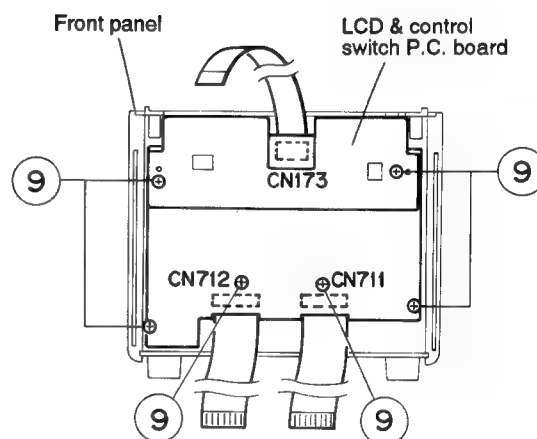


Fig. 5-30

## ■ Removing the system CPU P.C. board

(See Fig. 5-31)

1. Disconnect the card wires respectively from the connectors CN706 and CN707 on the system CPU P.C. board.
2. From the chassis, remove the three screws ⑩ retaining the system CPU P.C. board.
3. From the connector CN2 on the tuner P.C. board, remove the connector wire outgoing from W701 on the system CPU P.C. board.

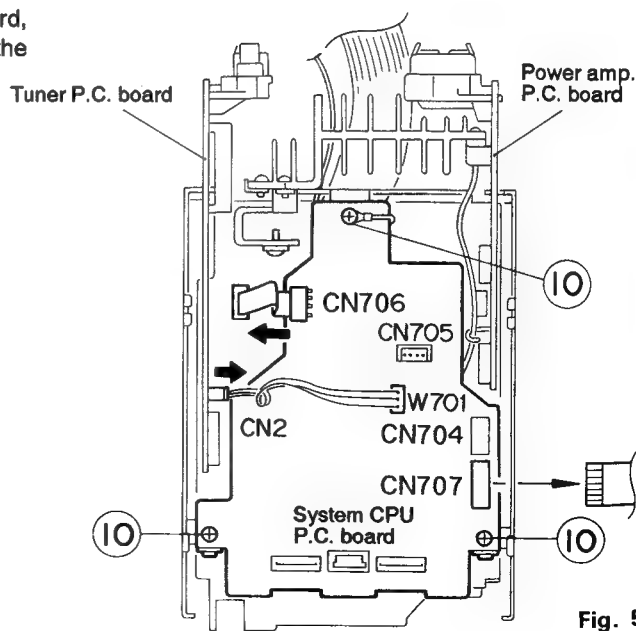


Fig. 5-31

### ■ Removing the power amp. P.C. board and heat sink (See Figs. 5-32 and 5-33)

1. From the back face of the body, remove the three screws { ⑪ x 2 and ⑫ x 1 } retaining the heat sink. For dismantling the heat sink alone, further remove the two screws ⑬.
2. While disconnecting the connectors CN301 and CN308 on the power amp. P.C. board respectively from the function P.C. board, remove the power amp. P.C. board upward, and disengage the engagement ⑨ between the chassis and P.C. board in arrow direction.

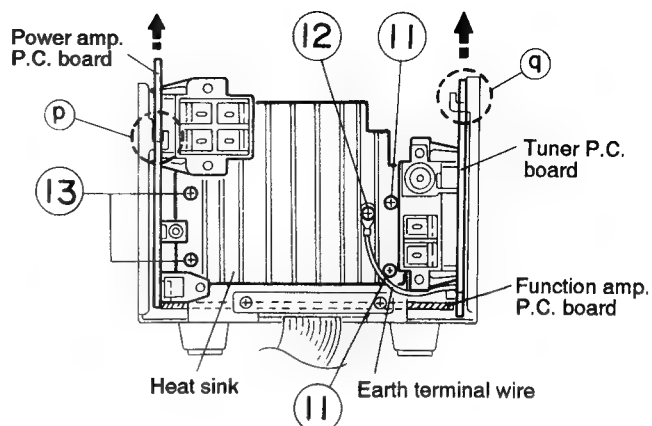


Fig. 5-32

### ■ Removing the tuner P.C. board

(See Figs. 5-32 and 5-33)

1. From the function amp. P.C. board, disconnect the connector CN1 on the tuner P.C. board in upward direction, and disengage the engagement ⑩ between the chassis and P.C. board in arrow direction.

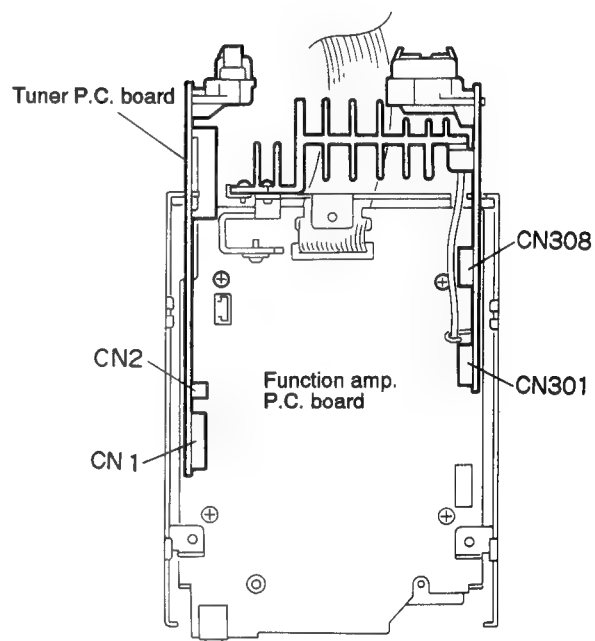


Fig. 5-33

### ■ Removing the function amp. P.C. board

(See Figs. 5-34 and 5-35)

Remove the four screws ⑭ retaining the function amp. P.C. board, and dismount the P.C. board from the chassis. In case of disconnecting the connector cable from the function amp. P.C. board, move the lock of the connector CN309 upward in the arrow direction, and pull out the cable.

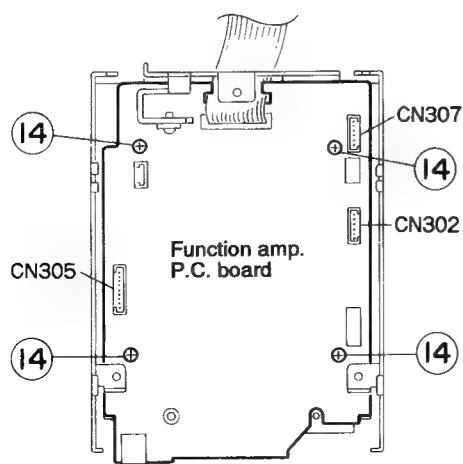


Fig. 5-34

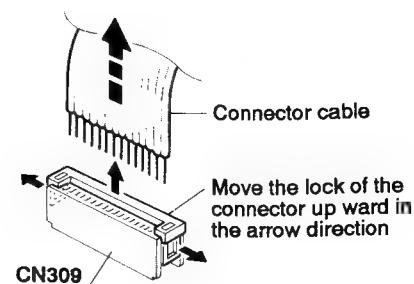


Fig. 5-35

### ■ Removing the CD servo control P.C. board

(See Fig. 5-36)

From inside the CD player section, remove the three screws ⑮ retaining the CD servo control P.C. board.

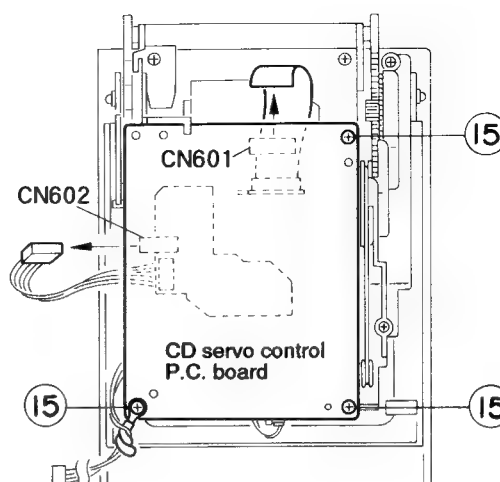


Fig. 5-36

### ■ Removing the CD mechanism (See Fig. 5-37)

1. Remove the two screws ⑯ retaining the CD mechanism.
2. Remove the CD mechanism holder and hook (Unhook the CD mechanism holder).
3. Remove the two screws ⑰ retaining the CD mechanism.
4. After moving the CD mechanism in the arrow direction, take out the turn table from the chassis.

### ■ Removing the door opening/closing detector switch P.C. board (See Fig. 5-37)

Remove the one screw ⑱ retaining the door opening/closing detector switch P.C. board.

### ■ Removing the CD door gear unit (See Fig. 5-37)

Remove the two screws ⑲ retaining the CD door gear unit.

### ■ Removing the door drive motor (See Fig. 5-38)

1. Remove the one screw ⑳ retaining the door drive motor.
2. Dismount the belt from the motor pulley.

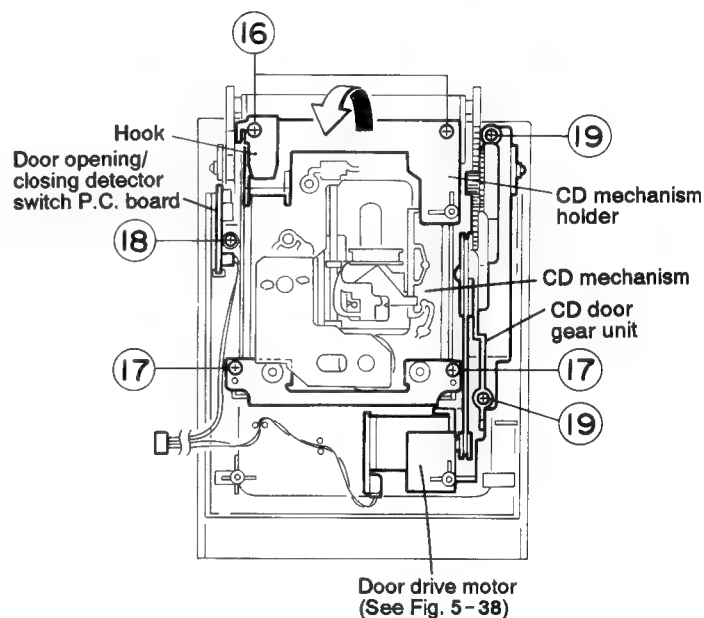


Fig. 5-37

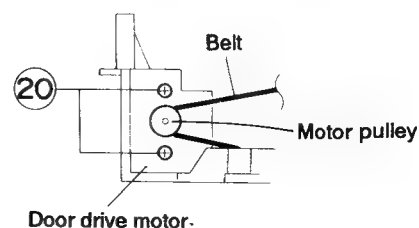


Fig. 5-38

## 《Cassette Mechanism Section》

### ■ Removing the head mount assembly

(See Figs. 5-39 and 5-40)

1. Remove the deck & power supply unit and cassette door cover.
2. Remove the front cover.
3. Remove the top cover.
4. Remove the front panel.
5. Remove the front panel assembly.
6. Remove the cassette mechanism assembly.
7. Remove the three screws ① retaining the head mount assembly (See Fig. 5-39).
8. After removing the FPC holder from the chassis, disconnect the head flexible wire from the connector CN301 on the head amp. P.C. board (See Fig. 5-13).

**Caution 1.** Whenever the head mount assembly has been changed, be sure to adjust the head azimuth.

**Caution 2.** The direction lever gear and head mount gear should be reassembled according to the methods in Fig. 5-40.

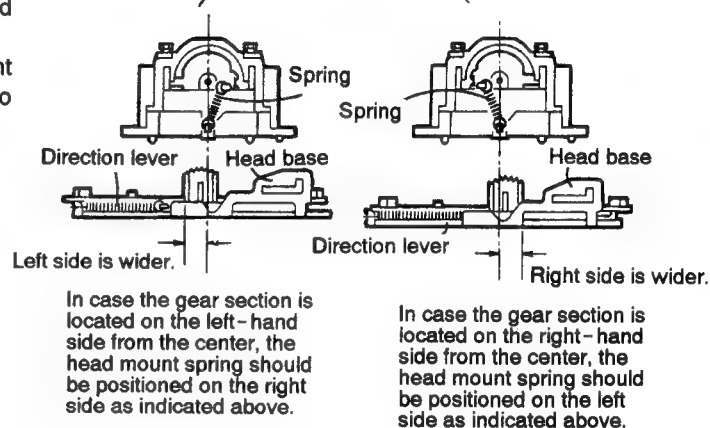
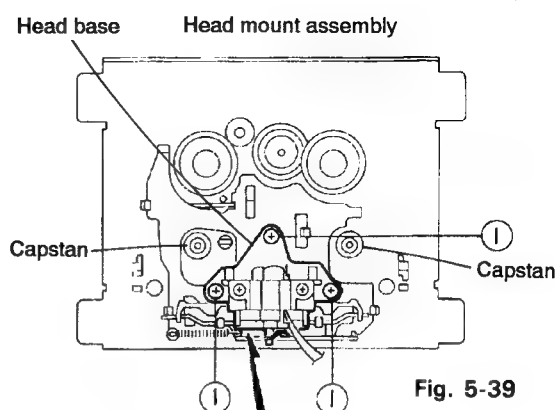


Fig. 5-40

### ■ Removing the pinch roller assembly

(See Fig. 5-41)

After opening the pawl ③ retaining the right side pinch roller assembly toward outside, pull out the pinch roller assembly. The left side pinch roller assembly should also be pulled out similarly according to the above step.

**Caution:** When assembling each pinch roller assembly, make sure that the stud is inserted between the direction lever and pinch roller spring.

When assembling this assembly, insert the stud into the direction level.

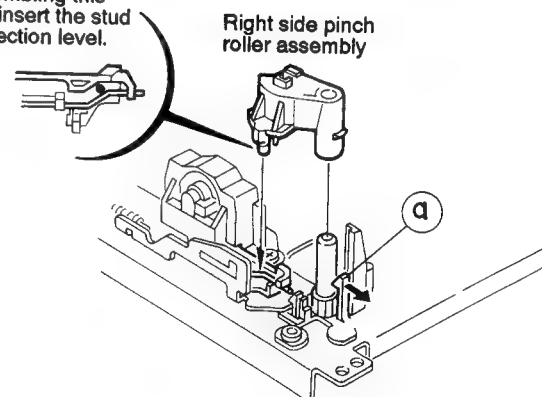


Fig. 5-41

### ■ Removing the FM bracket assembly

(See Figs. 5-42~5-44)

1. Remove the three screws ② retaining the FM bracket assembly (See Fig. 5-42).
2. While opening the two engagements ① fixing the FM bracket assembly to outside, remove the bracket assembly (See Fig. 5-42).
3. While raising the FM bracket assembly, remove the capstan belt and flywheel.

**Caution:** In this case, the belt and flywheel should be removed so carefully as not to cause any damage to the reel belt.

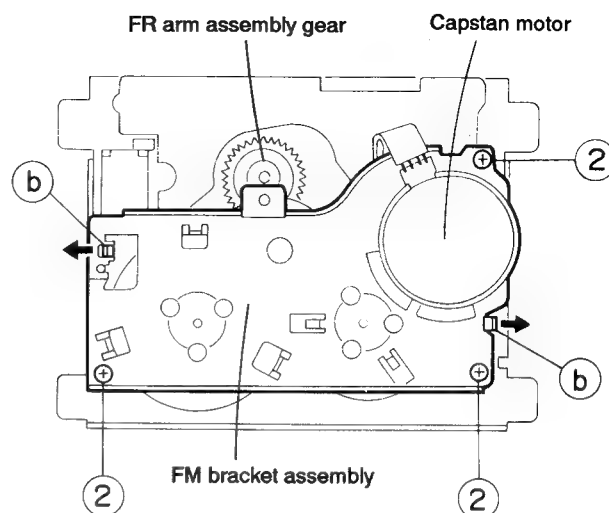


Fig. 5-42

### ● Method of reassembling the FM bracket assembly

(See Fig. 5-42~5-44)

1. First of all, attach the larger flywheel to the slide guide of the FM bracket assembly as shown in Fig. 5-43.
2. Set the FM bracket assembly to the two engagements ③ (See Fig. 5-43).
3. Pass the thrust guide of the flywheel through the notch ④ and turn the flywheel (See Fig. 5-43).
4. Next, set the smaller flywheel similarly according to the above steps (See Fig. 5-43).
5. Hang the capstan belt (See Fig. 5-44).
6. Hang the reel belt on the hook as shown in Fig. 5-44.
7. After turning the FM bracket assembly upside down, insert the flywheel capstan shaft into the bearing at first.
8. After making sure that the reel belt is not twisted, remove the belt from the stud and hang this belt onto the flywheel (See Fig. 5-44).
9. Mount the FM bracket assembly.

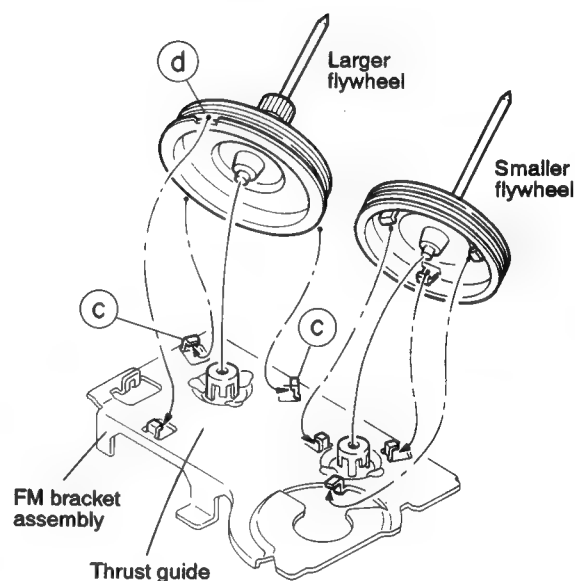


Fig. 5-43

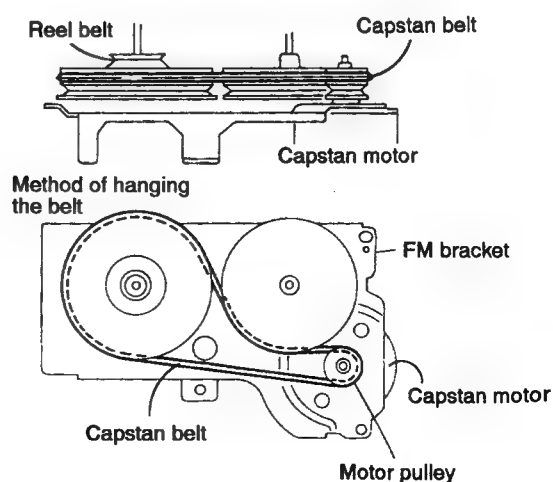


Fig. 5-44

### ■ Removing the leaf switch P. C. board

(See Fig. 5-45)

1. Remove the solenoid terminal soldering.
2. Remove the one screw ③ retaining the leaf switch P.C. board.
3. Disengage the four engagements ④ fixing the leaf switch P.C. board.

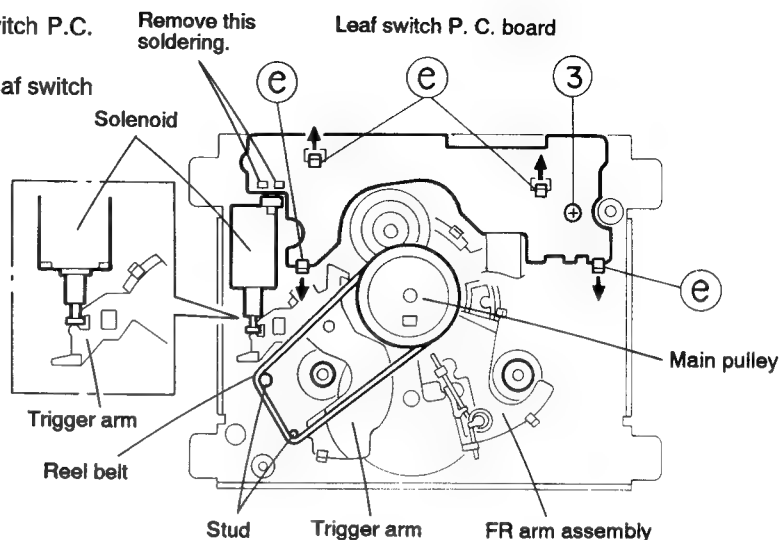


Fig. 5-45

### ■ Removing the control cam

(See Figs. 5-45~5-47)

1. Remove the FM bracket assembly and flywheel.
2. Dismount the reel belt and pull out the main pulley (See Fig. 5-45).
3. While opening the two pawls ① fixing the trigger arm in the arrow direction, remove the arm from the clamp shaft (See Fig. 5-46).
4. Dismount the elevator ring (See Fig. 5-47).
5. Remove the FR arm spring, and while opening the four pawls ② fixing the FR arm toward outside, pull out the FR arm assembly (See Fig. 5-46).
6. While aligning the engagement ③ of the control cam to the center of bearing hole, pull out the control cam (See Fig. 5-46).

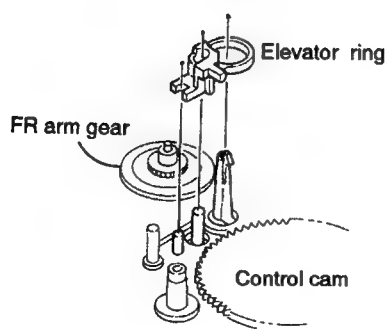


Fig. 5-47

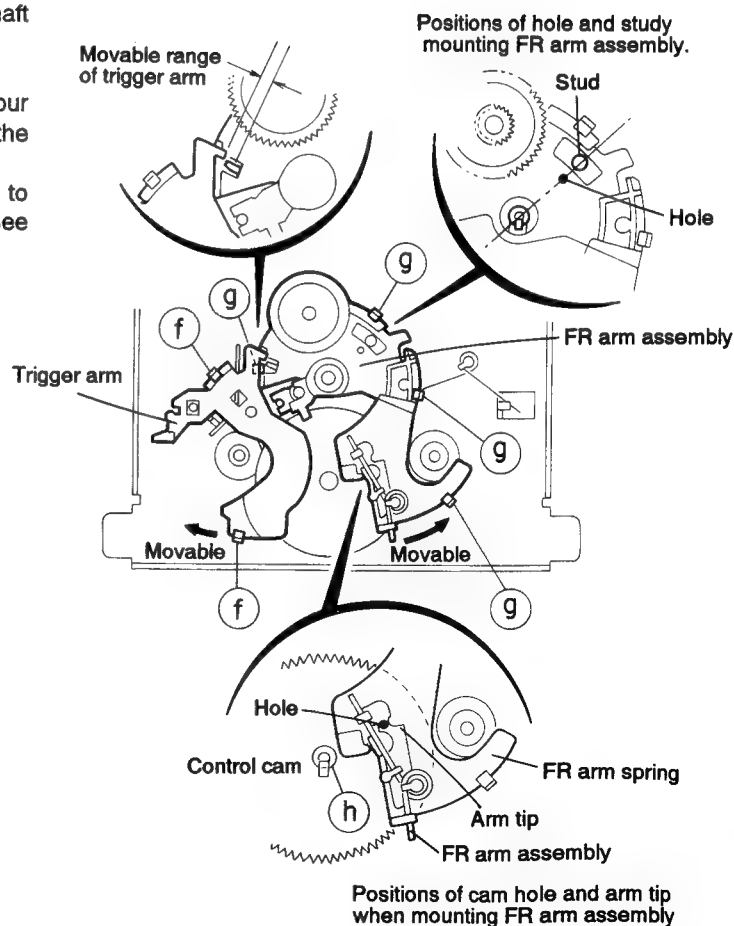


Fig. 5-46

### ● Reassembling the control cam

(See Figs. 5-46~5-51)

1. When assembling the control cam, pull the head base toward the front side while pressing the forward/reverse arm in the arrow direction.
2. Under the conditions in Step 1, the head base beneath the control cam and the position of the forward/reverse arm stud should be moved in the arrow direction (See Fig. 5-49).

**Caution 1:** Make sure that the cam is turned smoothly when turning it in counterclockwise direction.

**Caution 2:** The cam spring should be clicked due to the cross movement of the head base.

3. After attaching the control cam to the shaft, align the concave section ① of the control cam to the position as shown in Fig. 5-50 while moving the forward/reverse arm and head base.
4. For making it possible to mount the FR arm assembly, align the concave section ① of the control cam to the position as shown in Fig. 5-51 while turning the control cam.

**Caution 1:** The positions of the hole and stud in Fig. 5-46 should be aligned so carefully for mounting the FR arm assembly (See Fig. 5-46).

**Caution 2:** Confirm that the FR arm is reset to the initial position by moving the arm in the arrow direction.

5. Attach the elevator ring (See Fig. 5-47).

6. Attach the trigger arm.

**Caution:** Confirm that the trigger arm is reset to the initial position by moving the arm in the arrow direction.

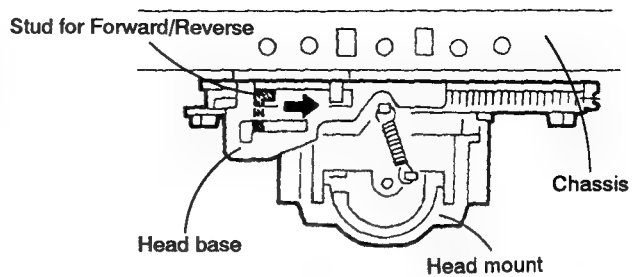


Fig. 5-48

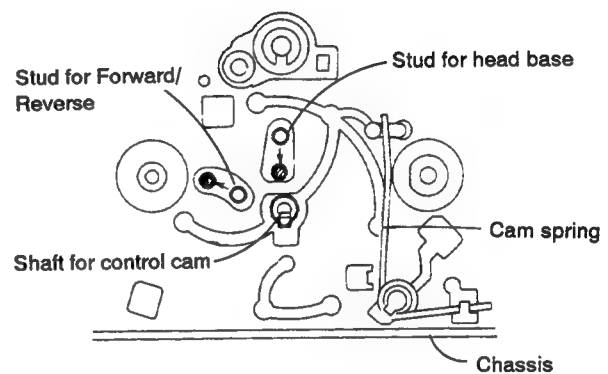


Fig. 5-49

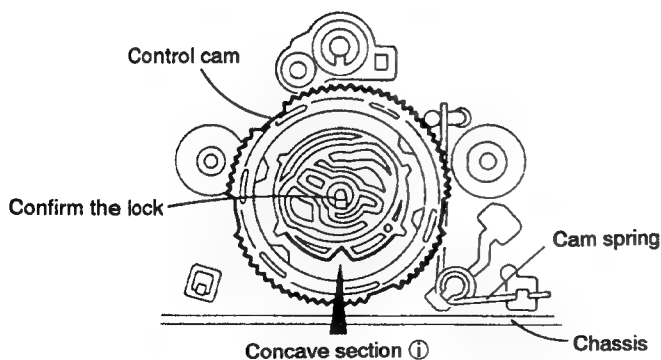


Fig. 5-50

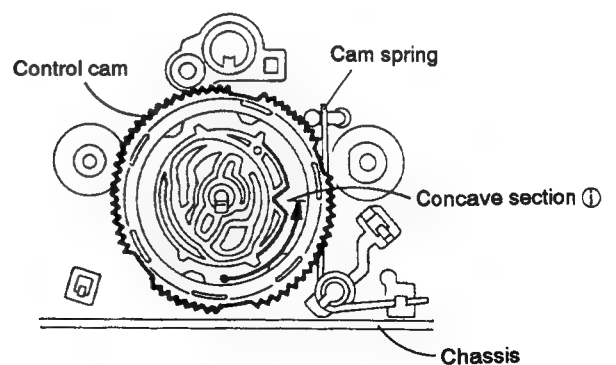


Fig. 5-51

## 6. Main Adjustment

### ■ Test Instruments required for adjustment

1. Low frequency oscillator  
(oscillation frequency: 50Hz to 20kHz)  
( Output : 0 dBs with 600  $\Omega$  terminator)
2. Attenuator( Impedance : 600  $\Omega$  )
3. Test Tapes  
VTT712 .....Tape speed, wow & flutter 3kHz  
VTT727 ..... Playback reference level 400Hz  
TTT739 .....Playback frequency response  
VTT704 ..... Head azimuth 12.5kHz
4. Electronic voltmeter, Distortion meter
5. Torque gauge..... Cassette type for CTG – N  
mechanism adjustment
6. Wow and Flutter meter , Frequency counter
7. CD test disc ..... CTS – 1000
8. Jitter meter(MJM631)
9. Blank tape : AC – 225(TYPE 1), AC – 514(TYPE 2)

### ■ Measuring conditions (Amplifier section)

Rating voltage

AC230V(50Hz)

Reference output : Speaker ..... 0 dBs (0.775V) / 4  $\Omega$   
: Headphone – 21 dBs (0.069V)/ 32  $\Omega$   
: Line out – 3.8dBs(0.5V)/47k  $\Omega$

Reference input : AUX IN – 3.8dBs

### ● Standard position of functionswitches

Function switch ..... TAPE  
DOLBY NR , Active hyper bass switch .....OFF  
Timer switch.....OFF

### ● Standard position of volume control

BASS, TREBLE ..... CENTER  
Volume control ..... adjust to 0dBs output

### ● Test remarks

1. Negative side of the input and output on the testing set, that ought to be separately to each other, and then bear in mind there connection the testing set with 2 channeles Electronic voltmeter, the negative side never connect commonly.

2. Replaced output load with a dummy and that lead wire to be used as big as posible.
3. Attach top cover when measuring and connect filter shown below Fig. 1 to V. meter.

### ■ Measuring condition (Radio section)

Refer to rating source ..... Tuner+B : DC 12V  
Reference output .....Speaker : 0dBs(0.775V) / 4  $\Omega$   
AM frequency ..... 400Hz modulation 30%  
FM frequency .....400Hz modulation  
frequency deviation 22.5kHz

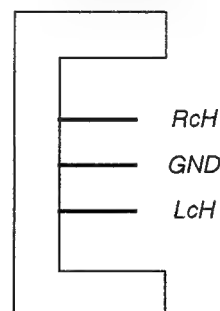
### ● Standard position of switches and controllers

Function..... RADIO  
Active Hyper Bass ..... OFF  
Bass/Treble ..... Center

### ● Careful points for adjustment

1. Connect 30 pF capacitor and 33 k  $\Omega$  resistor to the output side of the IF sweeper in series while 0.082  $\mu$  F capacitor and 100k  $\Omega$  resistor to the input side in series.
- 2.Set output level of the IF sweeper as minimum as adjustable.
3. RF Alignment order  
Procedure of the steps of tracking should be kept.

Test point : DOLBY NR TP CN322



## ■ Arrangement of Adjusting & Test Points

### 《Cassette mechanism section》

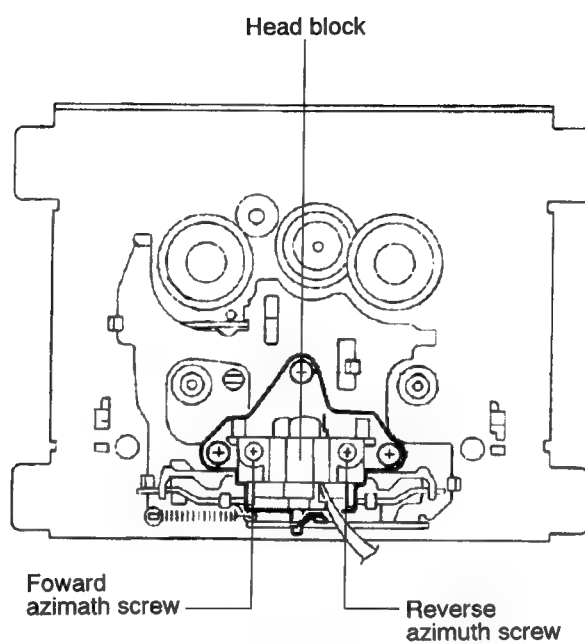


Fig. 6-1

### 《Deck & power supply unit section》

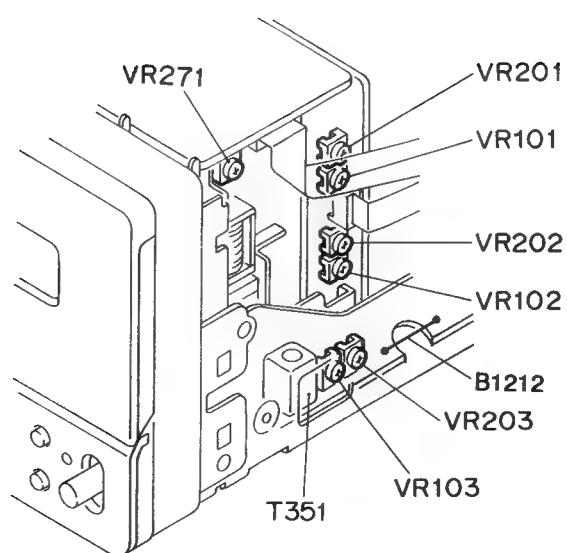


Fig. 6-2

# Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Head azimuth adjustment	Test tape : VTT704(12.5kHz) Output terminal : : Line out	① Playback the Test tape VTT704 (12.5kHz). ② Adjust the head azimuth so that the phase difference is minimum .( Within 1dB of the peak level of play output. ) ③ After adjustment apply the screw locking adhesive to the head azimuth screw more than at half around the screw head. ※ Whenever the head is changed the azimuth should be readjusted.	Output : Within 1dB of the peak level  Phase difference : minimum	Head azimuth screw
Tape speed adjustment  Wow &Flutter check	Test tape : VTT712(3kHz) Output terminal : Line out	① Playback the Test tape VTT712 (3kHz) by near the end position, ② Check that the frequency counter reading is $3010 \pm 10\text{Hz}$ . If the reading is out of this range, adjust the VR271. ③ Wow &Flutter should be less than 0.25%(JIS WTD).	Tape speed : $3010 \pm 10\text{Hz}$  Wow &Flutter : less than 0.25%(JIS WTD).	VR271
Playback output level adjustment	Test tape : VTT727(400Hz) Output terminal : Line out	① Playback Test tape VTT727(400Hz) . ② Adjust VR101(Lch) and VR201(Rch) so that output level on Line out terminal( J171) to $-1\text{dBs} \pm 0.5\text{dBs}$ .	$-1\text{dBs} \pm 0.5\text{dBs}$	Lch : VR101 Rch : VR201
Playback frequency response check	Test tape : VTT739 : TMT735. Output terminal : Line out	① Playback Test tape VTT739 and TMT735. ② Frequency response should be $0\text{dB} \pm 4\text{dB}$ against 63Hz to 1kHz. ③ Frequency response should be $+1\text{dB} \pm 3\text{dB}$ against 1kHz to 12.5kHz.	1k / 63Hz : $0 \pm 4\text{dB}$ 1k / 12.5kHz : $+1 \pm 3\text{dB}$	—
Bias oscillation frequency adjustment	Test tape : AC-514 Output terminal : Bias TP B1212	① Connect the Bias TP B1212 with frequency counter. ② Insert the test tape AC-514. ③ Start the recording, make the state pause. ④ Confirm that the frequency counter reading is $100\text{kHz} \pm 0.2\text{kHz}$ . If the reading is out of this range, adjust T351.	$100\text{kHz} \pm 0.2\text{kHz}$	T351

# Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Record & Playback frequency response adjustment	Test tape : AC-225 Reference frequency : 1.25k, 12.5kHz (Ref. – 20dB) Output terminal : Line out Input terminal : Line in	① Record & Playback the test tape AC-225 from Line in terminal at 1.25kHz and 12.5kHz reference frequency. ② Adjust the VR103 (Lch) and VR203 (Rch) so that the output deviation between the 1.25kHz and 12.5kHz signal $1\text{dB} \pm 3\text{dB}$ .	$1\text{dB} \pm 3\text{dB}$ .	Lch : VR103 Rch : VR203
Record & Playback sensitivity adjustment	Test tape : AC-225 Reference frequency : 400Hz (Ref. – 20dB) Output terminal : Line out Input terminal : Line in	① Record & Playback the test tape AC-225 from Line in terminal at 400Hz reference frequency. ② Adjust the VR102 (Lch) and VR202 (Rch) so that the output deviation between the $-24\text{dB} \pm 1\text{dB}$ .	$-24\text{dB} \pm 1\text{dB}$	Lch : VR102 Rch : VR202

## 7. Out Line of Main IC

### ◆ IC133 (BA15218) Mixing Amplifier

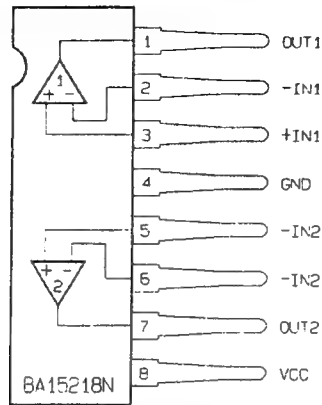


Fig. 7-1

### ◆ IC331 (UPC1228HA) Head Amplifier

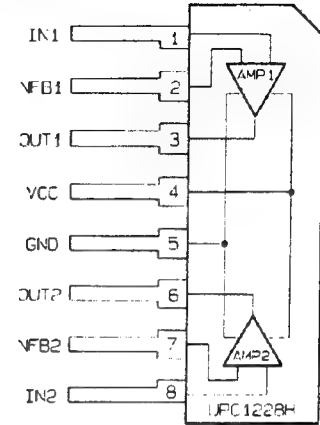


Fig. 7-2

### ◆ IC332 (UPC1330HA) Recording & Playback Selector

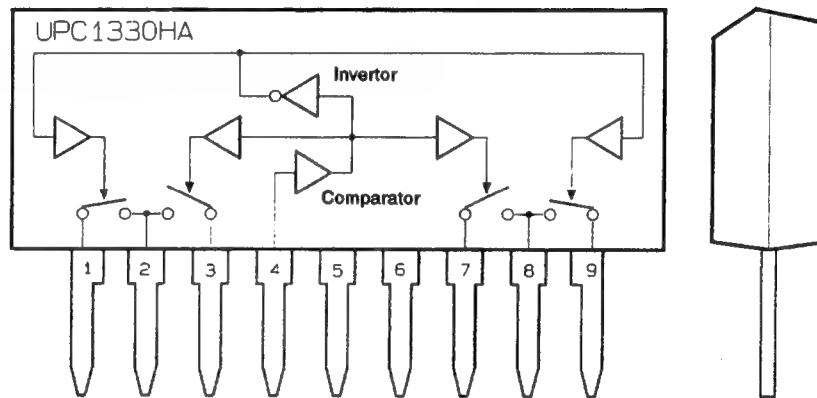


Fig. 7-3

### ◆ IC322 (LA3220) Recording Amplifier

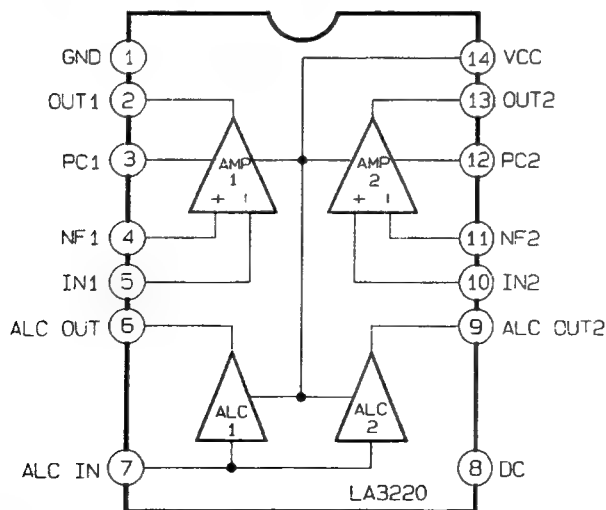


Fig. 7-4

### ◆ IC321 (HA12134A) Dolby NR

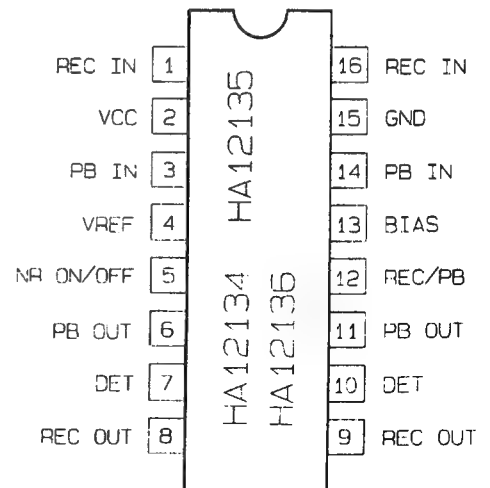


Fig. 7-5

■ IC701 : MN101C03AJA1 ( CPU ) Terminal's Function Table

Pin No.	Symbol	I/O	Function
1	COM3	0	LCD Common 3
2	COM2	0	LCD Common 2
3	COM1	0	LCD Common 1
4	COM0	0	LCD Common 0
5	VLC3		LCD power source
6	VLC2		LCD power source
7	VLC1		LCD power source
8	Vdd		Power source D
9	OSC2	0	Main clock 32kHz
10	OSC1	I	Sub clock 32kHz
11	Vss		Ground A
12	XI	I	Sub clock 32kHz
13	XO	0	Sub clock 32kHz
14	MMOD		Ground
15	Vref		Ground A
16	KEY1	I	Key in 1
17	KEY2	I	Key in 2
18	DOOR RESET	I	Detecting for Door & Reset
19	LOCK	I	Detecting for Door & Lock
20	TAPE	I	Detecting for tape
21	SAFETY	I	Detecting for Safety
22	CD SAFETY	I	Detecting for CD Safety
23	VERSION	I	Detecting for Version
24	Vref +		Power source
25	SO	0	Serial data out
26	SI	0	Serial data in
27	CK	0	Serial data clock
28	BEAT	0	Beat cut
29	QRIN	I	Data in for Subq/RDS
30	QRCK	0	SUBQ/RDS Clock
31	STTA	0	Strobe tape
32	RST	I	Reset
33	STSO	0	Strobe sound IC
34	PLAY/MS	I	Play/MS
35	HALL	I	Tape end
36	NC		Non Connection
37	AHB	0	Active Hyper Bass
38	MPX	I	Tuner Stereo
39	REM	I	Remote control in
40	NC		Non Connection

Pin No.	Symbol	I/O	Function
41	STAT	0	CD Status
42	BUF	0	Detecting for backup
43	F.TU	0	Function Tuner
44	NC		Non Connection
45	F.CD	0	Function CD
46	POUT	0	Power control
47	MLD	0	CD Command load
48	MDATA	0	CD Command data
49	MCLK	0	CD Command clock
50	XRST	0	CD LSI reset
51	MTO	0	CD Door drive 0
52	MT1	0	CD Door drive 1
53	MTS	0	CD Door speed
54	PERIOD	0	Strobe Tuner
55	SMUTE	0	System mute
56	+ BCTRL	0	+ B control
57	VOL1	I	Volume encoder1
58	VOL2	I	Volume encoder2
59	NC		Non Connection
60	NC		Non Connection
61	NC		Non Connection
62	NC		Non Connection
63	NC		Non Connection
64	NC		Non Connection
65	SEG35	0	LCD Segment
66	SEG34	0	LCD Segment
67	SEG33	0	LCD Segment
68	SEG32	0	LCD Segment
69	SEG31	0	LCD Segment
70	SEG30	0	LCD Segment
71	SEG29	0	LCD Segment
72	SEG28	0	LCD Segment
73	SEG27	0	LCD Segment
74	SEG26	0	LCD Segment
75	SEG25	0	LCD Segment
76	SEG24	0	LCD Segment
77	SEG23	0	LCD Segment
78	SEG22	0	LCD Segment
79	SEG21	0	LCD Segment
80	SEG20	0	LCD Segment

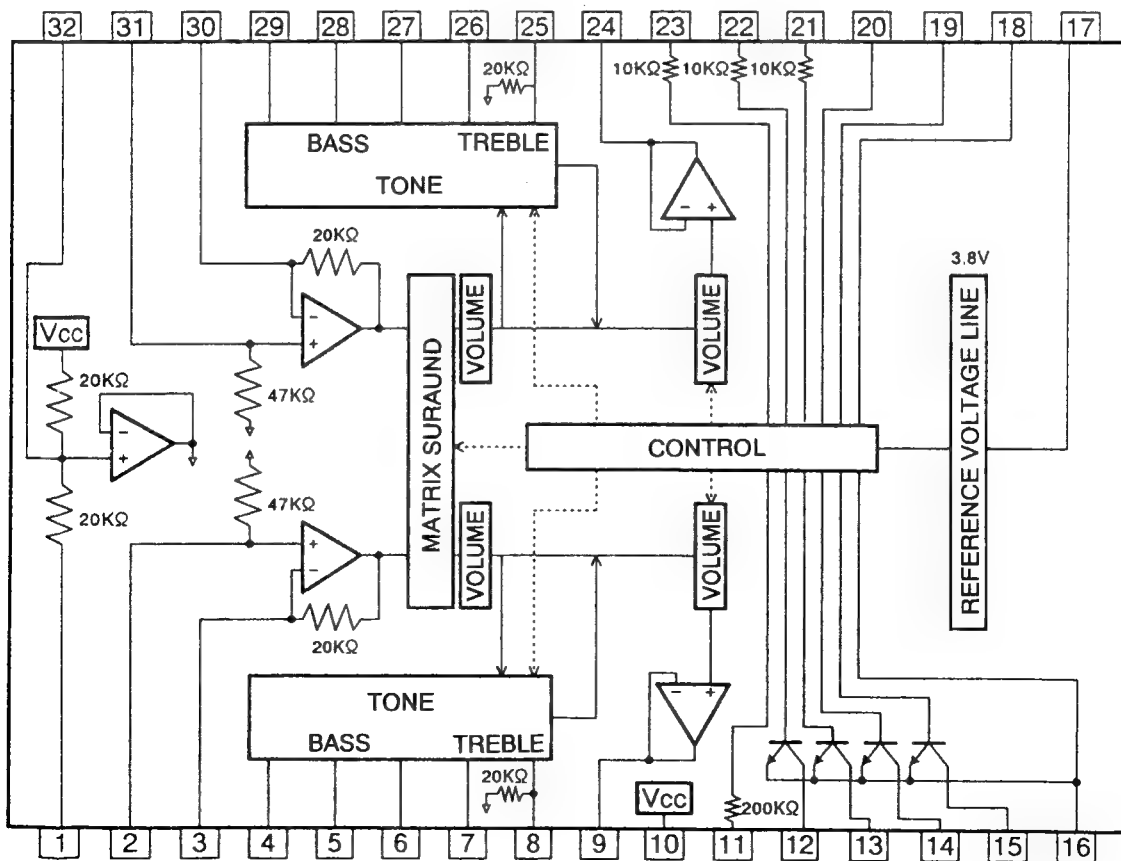
Pin No.	Symbol	I/O	Function
81	SEG19	0	LCD Segment
82	SEG18	0	LCD Segment
83	SEG17	0	LCD Segment
84	SEG16	0	LCD Segment
85	SEG15	0	LCD Segment
86	SEG14	0	LCD Segment
87	SEG13	0	LCD Segment
88	SEG12	0	LCD Segment
89	SEG11	0	LCD Segment
90	SEG10	0	LCD Segment
91	SEG9	0	LCD Segment
92	SEG8	0	LCD Segment
93	SEG7	0	LCD Segment
94	SEG6	0	LCD Segment
95	SEG5	0	LCD Segment
96	SEG4	0	LCD Segment
97	SEG3	0	LCD Segment
98	SEG2	0	LCD Segment
99	SEG1	0	LCD Segment
100	SEG0	0	LCD Segment

### ■ IC303 : Terminal Function Table of BH3854FS (Audio/Sound Control)

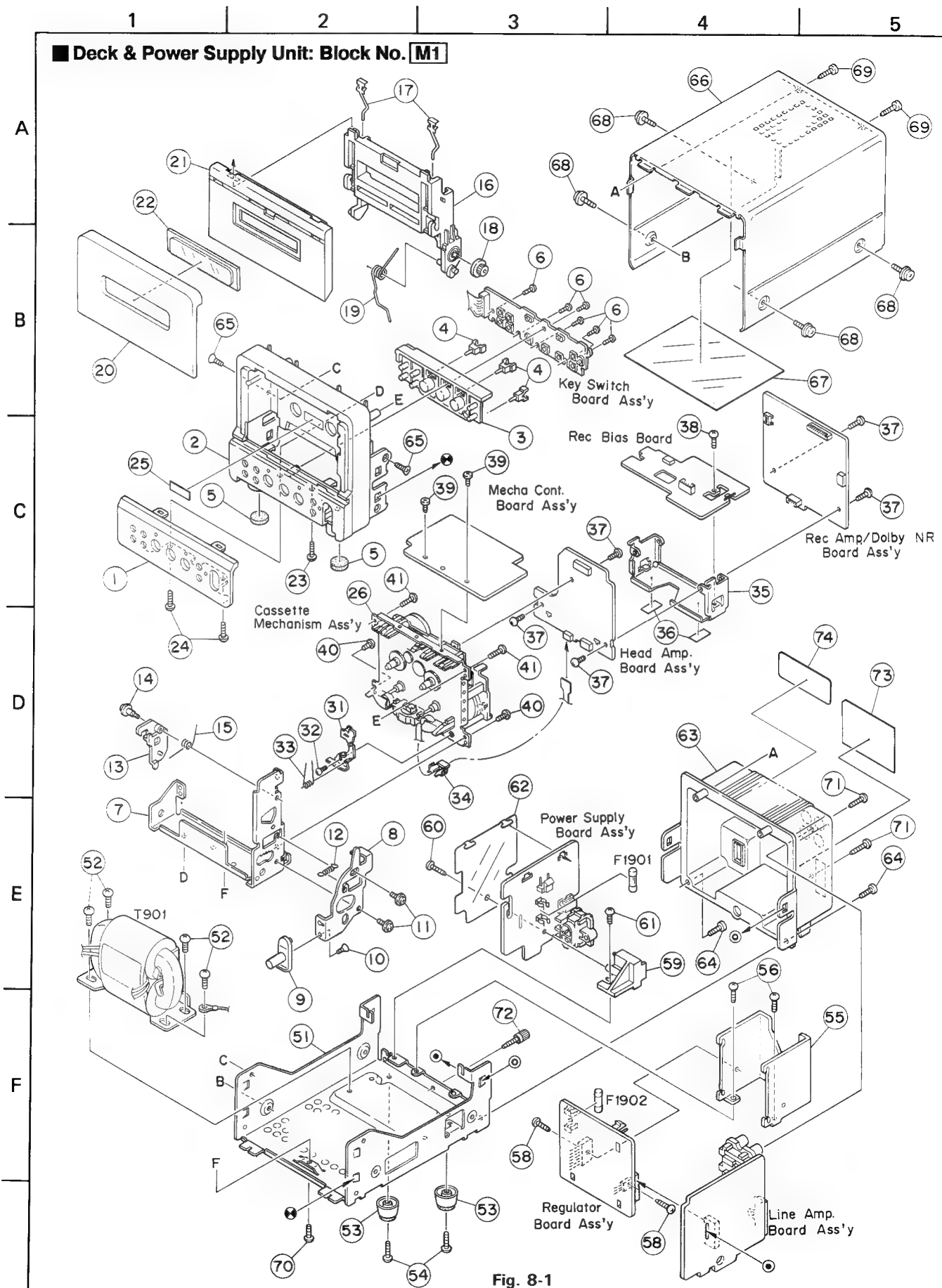
Pin No.	Symbol	I/O	Function
1	A_GND		Analog system gland
2	IN1		1ch volume input terminal
3	NF1		Input stage AMP. gain adjusting terminal
4	BVN1		1ch low pass filter connector terminal
5	BIN1		1ch low pass filter connector terminal
6	BV01		1ch low pass filter connector terminal
7	TIN1		1ch low pass filter connector terminal
8	TV01		1ch low pass filter connector terminal
9	OUT1		1ch volume output terminal
10	Vcc		Power supply terminal
11	SC		Mounting terminal for constant (used to prevent a shock by selector)
12	PORT1		Port output terminal
13	PORT2		Port output terminal
14	PORT3		Port output terminal
15	PORT4		Port output terminal
16	D_GND		Digital system gland

Pin No.	Symbol	I/O	Function
17	VREF		3.8V reference voltage output terminal
18	LATCH		Latch data input terminal
19	DATA		Data input terminal
20	CK		Clock input terminal
21	BC		Mounting terminal for constant (used to prevent a shock by selector)
22	TC		Mounting terminal for constant (used to prevent a shock by selector)
23	VC		Mounting terminal for constant (used to prevent a shock by selector)
24	OUT2		2ch volume output terminal
25	TV02		2ch high pass filter connector terminal
26	TIN2		2ch high pass filter connector terminal
27	BV02		2ch low pass filter connector terminal
28	BIN2		2ch low pass filter connector terminal
29	BVN2		2ch low pass filter connector terminal
30	NF2		Input stage AMP. gain adjusting terminal
31	IN2		2ch volume output terminal
32	FILTER		Filter terminal

### ■ IC303 Block diagram



# 8. Analytic Drawing and Parts List





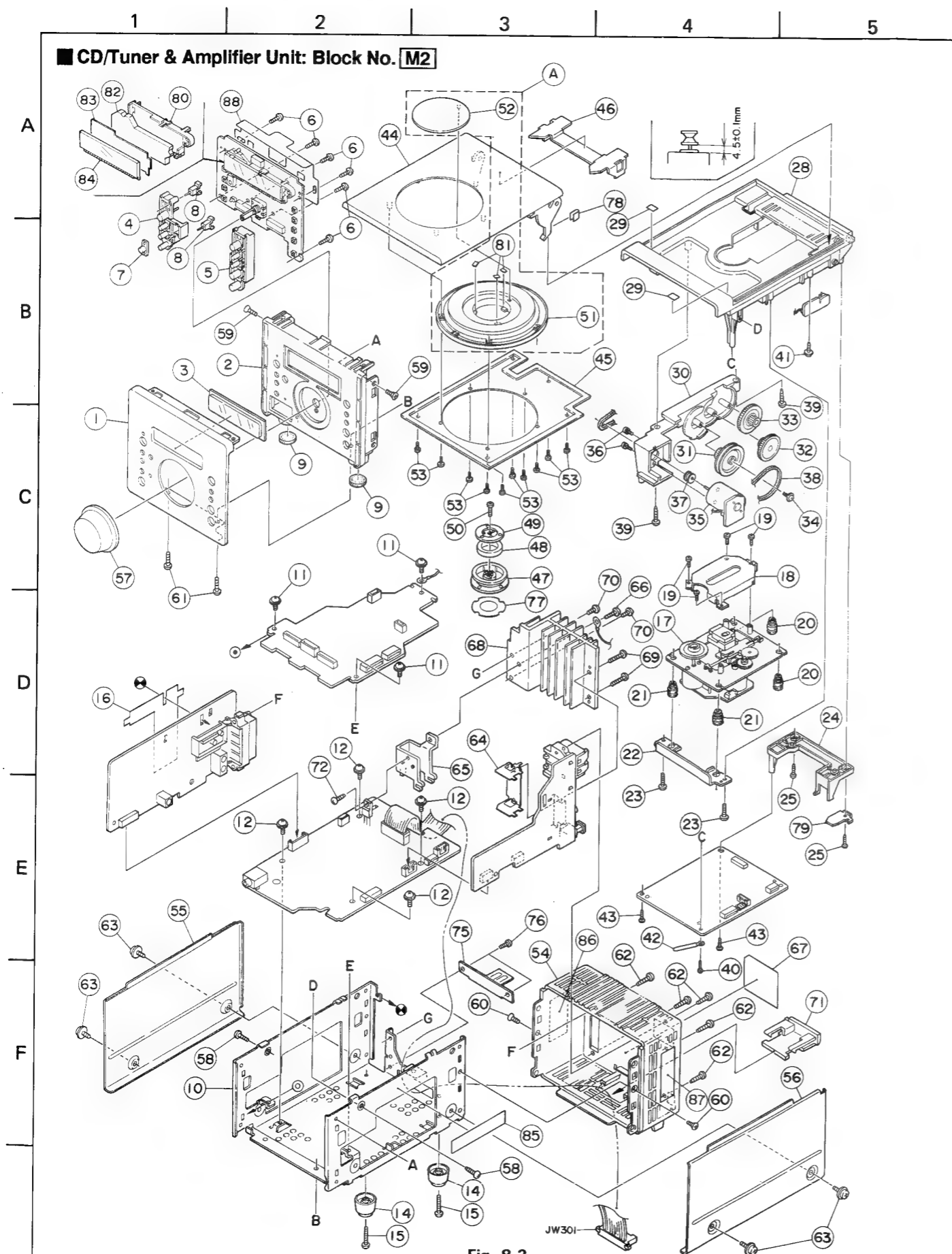


Fig. 8-2

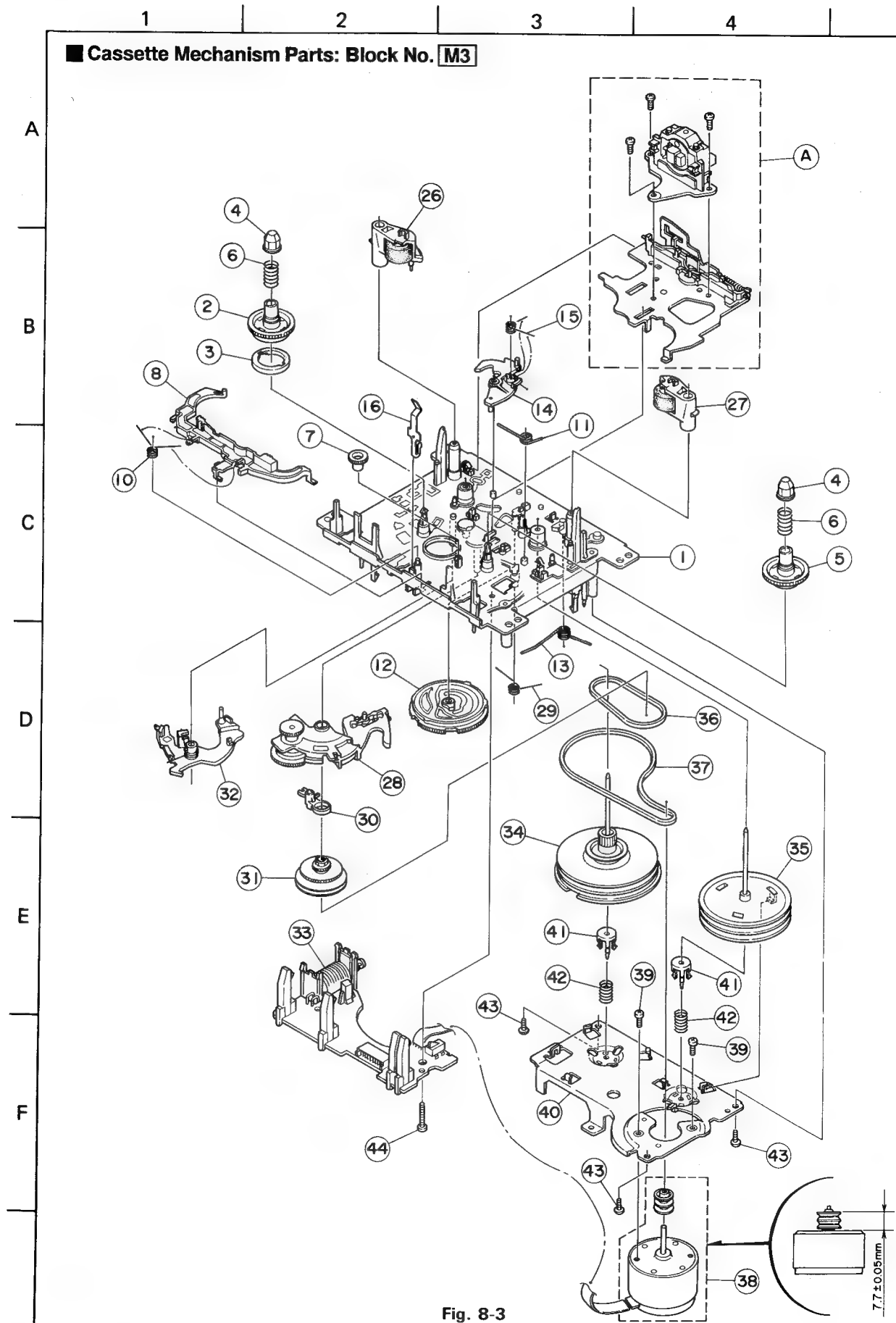
(No. 10030) 50

CD/Tuner & Amplifier Unit Parts List

BLOCK NO. M2MM						
REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	VJK4496-00C	CD LENS ASS'Y	NO.51,52,81	1		
1	VJC2576-003	FRONT PLATE(CD)		1		
2	VJG1420-006	FRONT PANEL(CD)		1		
3	VJK4486-002	LCD LENS		1		
4	VXP3801-002	FUN. BUTTON	BUTTON(A)	1		
5	VXP3805-002	F.BUTTON 2		1		
6	SBSF2608Z	SCREW	F.P+BUT+PWB	6		
7	E408131-001	REMOTE LENS		1		
8	VJK4485-001	LED LENS		2		
9	VJF4003-001	FOOT	FOR F.PANEL	2		
10	VKL1443-001	BOTTOM CHASSIS		1		
11	GBST3006Z	SCREW	TU PWB+CHASSIS	3		
12	GBST3006Z	SCREW	FUNC PWB+CHASSI	4		
14	E47227-039	FOOT ASSY		2		
15	SBST3008Z	SCREW	F.ASSY+CHASSIS	2		
16	VMA4704-001	BARRIER		1		
17	-----	C.D MECHA ASS'Y	OPTIMA-6	1		
18	VJD5410-005	PICK COVER		1		
19	SDSF2006M	SCREW	CD MECHA+P.COVE	4		
20	E75609-001	INSULATOR		2		
21	E75609-002	INSULATOR		2		
22	VYH3937-001	CD MECHA HOLDER		1		
23	SBSF3010Z	SCREW	CASE+HOLDER	2		
24	VYH7815-001	CD MECHA HOLDER		1		
25	SBSF3010Z	SCREW	CASE+HOLDER	2		
28	VJD1208-009	CD CASE		1		
29	VYSR102-065	SPACER		2		
30	VYH3935-002	GEAR BKT		1		
31	VYH7356-201	PULLEY		1		
32	VYH7357-201	GEAR(A)		1		
33	VYH8076-001	GEAR(B)		1		
34	GBSG3008Z	TAP.SCREW	PULLEY+GEAR BKT	1		
35	MXN-13FB12F	DC MOTOR ASS'Y	CASSETTE DOOR	1		
36	SPSP3004Z	SCREW	FOR MOTOR	2		
37	VYH7699-001	PULLEY	MOTOR	1		
38	VKB3000-175	BELT		1		
39	SBSF3010Z	SCREW	CD CASE+GEAR BK	2		
40	SBSF3010Z	SCREW	FOR WIRE CLAMP	1		
41	GBSF3010Z	TAPPING SCREW	SW PWB+CD CASE	1		
42	VKZ4001-110	WIRE CLAMP		1		
43	SBSF3010Z	SCREW	CD AMP PWB+CD	2		
44	VJT2373-003UL	CD DOOR		1		
45	VJC3296-001	PLATE		1		
46	VYH3970-002	DOOR SUPORT		1		
47	VYH3726-001SS	CLAMPER		1		
48	VYH7313-003	MAGNET		1		
49	VYH7677-201	YOKE		1		
50	SDSF2606Z	SCREW	FOR CLAMPER	1		
51	-----	CD LENS		1		
52	-----	DOOR PLATE		1		
53	SDSF2006M	SCREW	DOOR+LENS	10		
54	VJG1421-003	REAR COVER(T)		1		
55	VJC3293-001	SIDE PANEL(L)		1		
56	VJC3294-001	SIDE PANEL(R)		1		

BLOCK NO. M2M1111

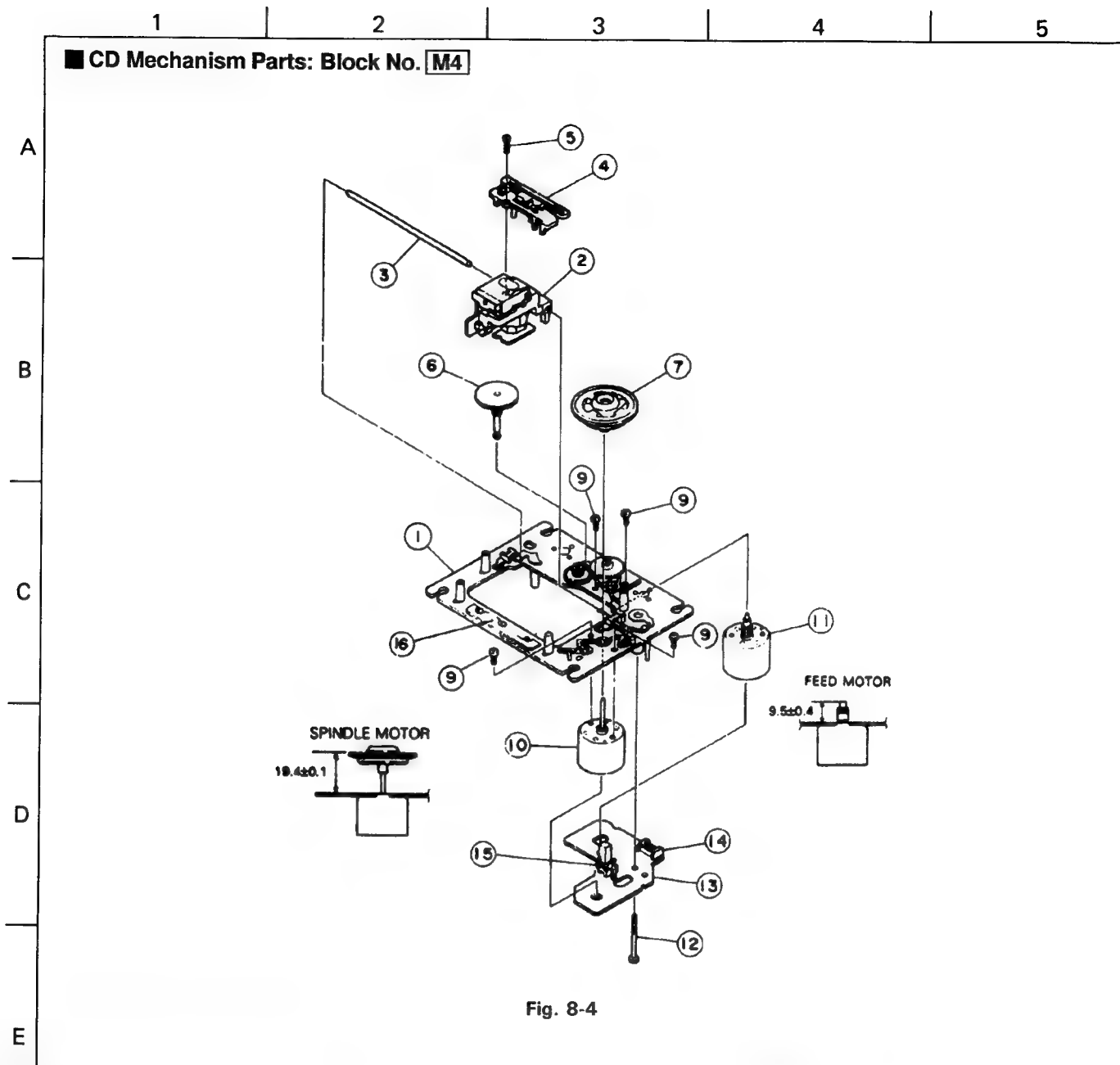
REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
57	VXL4447-002	VOLUME KNOB		1		
58	SBSF3010Z	SCREW	CD+CHASSIS UNIT	2		
59	SSST3006Z	SCREW	F.PANEL+CHASSIS	2		
60	SSST3006Z	SCREW	R.COVER+CHASSIS	2		
61	SXST3008NW	SCREW	F.PLATE+CHASSIS	2		
62	SBSF3008M	SCREW	R.COVER+JACK	5		
63	VKZ4614-002	SCREW	CHASSIS+S.PANEL	4		
64	VYH8103-002	IC HOLDER(A)		1		
65	VYH8085-001	IC HOLDER(B)		1		
66	SBSF3010Z	SCREW		1		
67	VYN9306-101	NAME PLATE		1		
68	VMH4053-201	HEAT SINK		1		
69	SBST2612Z	SCREW	H.SINK+IC HOL(A)	2		
70	SBST3006Z	SCREW	HEAT SINK+CHASS	2		
71	VYH7991-003	WIRE HOLDER		1		
72	SBSF3010Z	SCREW	IC HOL(B)+HEAT	1		
75	VYH8125-001	WIRE SHIELD		1		
76	SBST3006Z	SCREW	FOR WIRE SHIELD	2		
77	VYH8127-001	PAD		1		
78	VYH8128-001	DOOR PAD		1		
79	VYH8123-001	HOOK		1		
80	VYH3980-001	LENS CASE		1		
81	-----	SHEET		3		
82	VJK4501-001	LENS		1		
83	VYH8166-001	SHEET		1		
84	VGL1216-001	LCD	DI711	1		
85	E406709-001	LASER CAUTION		1		
86	E70891-001	CLASS 1 LABEL	METAL COVER	1		
87	VND4118-004	CAUTION LABEL		1		
88	VMA4717-001	LAMP SHEET		1		



# Cassette Mechanism Parts List

BLOCK NO. **M3MM**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	VKM3890-00A	HEAD BASE		1		
1	VKS1147-00A	CHASSIS B. ASY		1		
2	VKS3707-002	REEL GEAR		1		
3	VKZ4690-002	MAGNET		1		
4	VKS3708-002	REEL FEATHER		2		
5	VKS3707-002	REEL GEAR		1		
6	VKW5162-002	B.T. SPRING		2		
7	VKS5519-002	IDLER GEAR		1		
8	VKS2261-002	REEL BRAKE		1		
10	VKW5178-001	BRAKE SPRING		1		
11	VKW5202-002	LIFTER SPRING		1		
12	VKS1150-002	CONTROL CAM		1		
13	VKW5170-002	CAM SPRING		1		
14	VKS2255-001	DIR. TRIGGER		1		
15	VKW5163-001	DIR. SPRING		1		
16	VKY4670-001	CASSETTE SPRING		1		
26	VKP4231-00B	P.ROLLER(R) ASY		1		
27	VKP4232-00B	P.ROLLER(L) ASY		1		
28	VKS3714-00B	FR ARM ASY		1		
29	VKW5173-001	FR SPRING		1		
30	VKS3719-002	ELEVATOR RING		1		
31	VKS5523-00C	MAIN PLY ASY		1		
32	VKS5525-00B	TRIGGER ARM ASY		1		
33	VKZ3174-00A	DC SOLENOID		1		
34	VKF3200-00A	F.WHEEL (R) ASY		1		
35	VKF3202-00A	F.WHEEL (L) ASY		1		
36	VKB3000-167	REEL BELT		1		
37	VKB3000-160	CAPSTAN BELT		1		
38	MSI-5B2LW	D.C.MOTOR	CAPSTAN -SA4	1		
39	SPSP2603Z	SCREW		2		
40	VKM3833-001	FM BRACKET		1		
41	VKS5524-001	THRUST GUIDE		2		
42	VKW5177-002	THRUST SPRING		2		
43	SBSF2608Z	SCREW		3		
44	SDST2612Z	SCREW		1		

**CD Mechanism Parts List**BLOCK NO. **M4MM**

△ REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	EPB-002A	BASE ASS'Y		1		
2	OPTIMA-6S	PIC-UP		1		
3	E406777-001	GUIDE SHAFT		1		
4	E307746-001	CD RACK		1		
5	SDSF2006Z	SCREW	CD LACK ASS'Y	1		
6	EPB-003A	MECHA GIAR		1		
7	E75807-301	CD T.TABLE ASSY		1		
9	SDSP2003N	SCREW	FOR MOTOR	4		
10	E406783-001	SP MOTOR	SPINDL MOTOR	1		
11	E406784-001SA	DC MOTOR ASS'Y	FEED MOTOR	1		
12	E75832-001	S.SCREW	M.REAF SWITCH	1		
13	EMW10190-001	BOARD	LEAF SWITCH	1		
14	EMV5109-006B	6P PLUG ASSY		1		
15	ESB1100-005	LEAF SWITCH		1		
16	E407212-001	DAMPER		1		

# 9. Wiring Connections

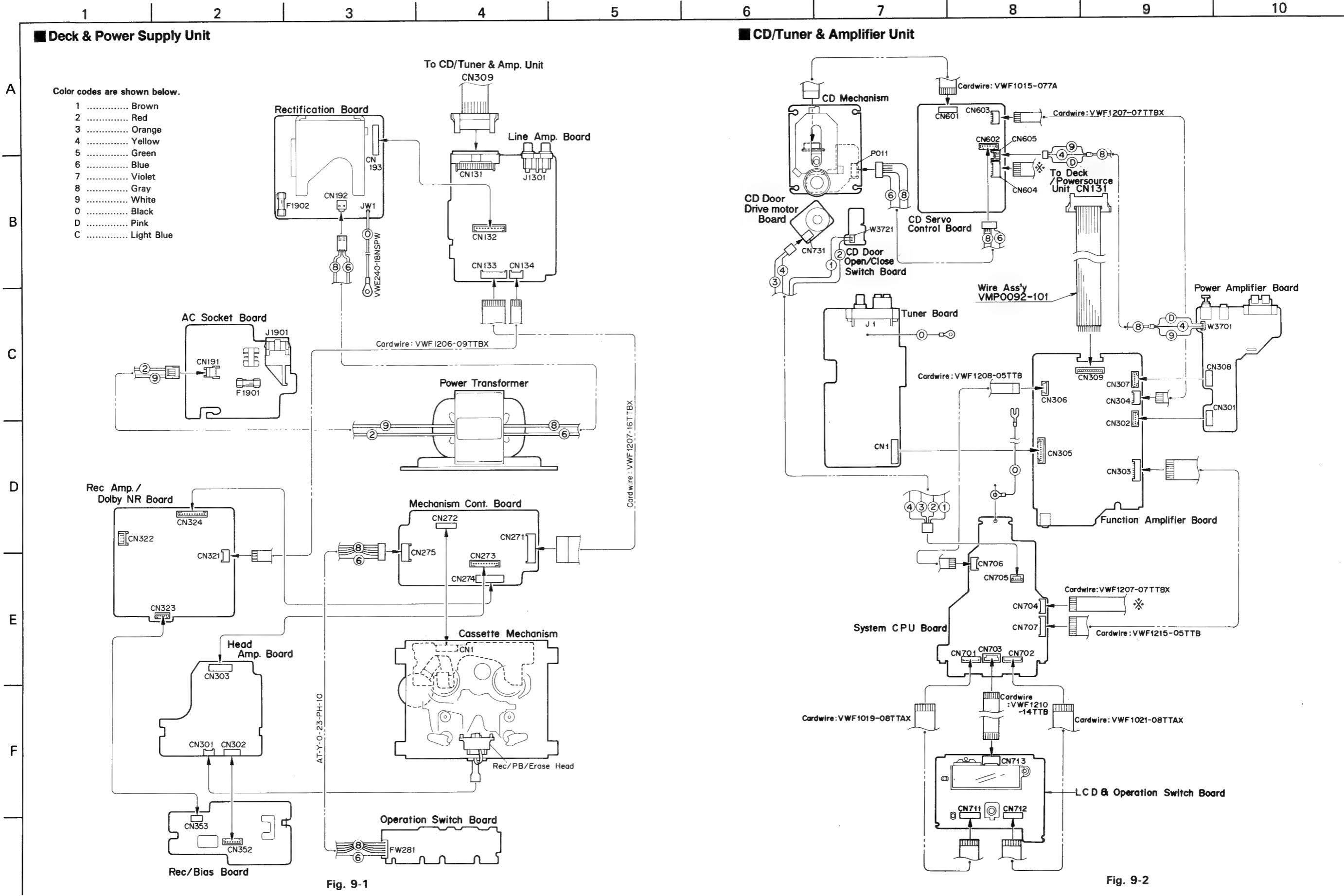


Fig. 9-1

Fig. 9-2

# 10. Block Diagram

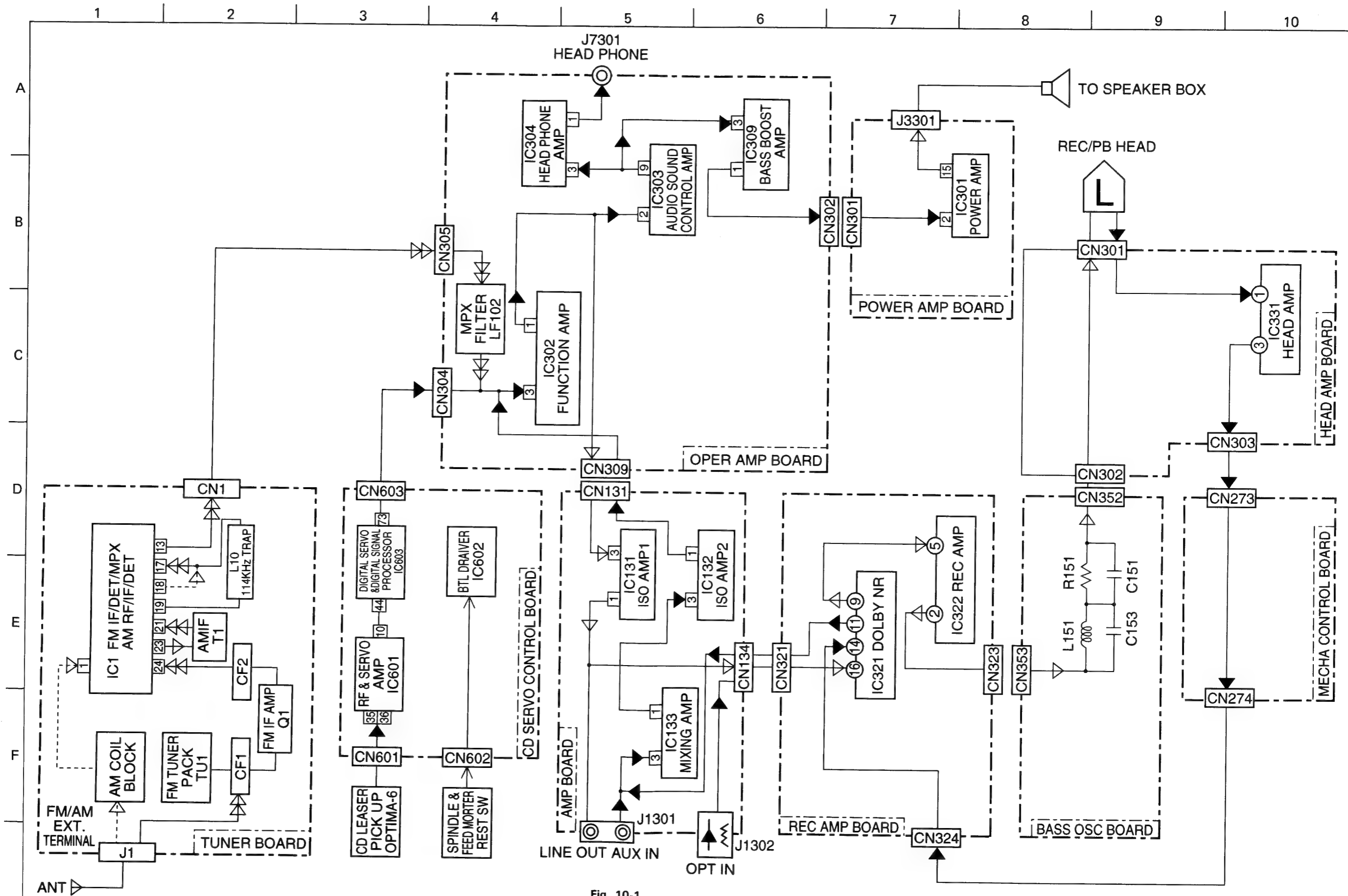


Fig. 10-1

# 11. Standard Schematic Diagrams

■ Head Amplifier & Mechanism Control Circuit: Drawing No. VDH9306-005PV

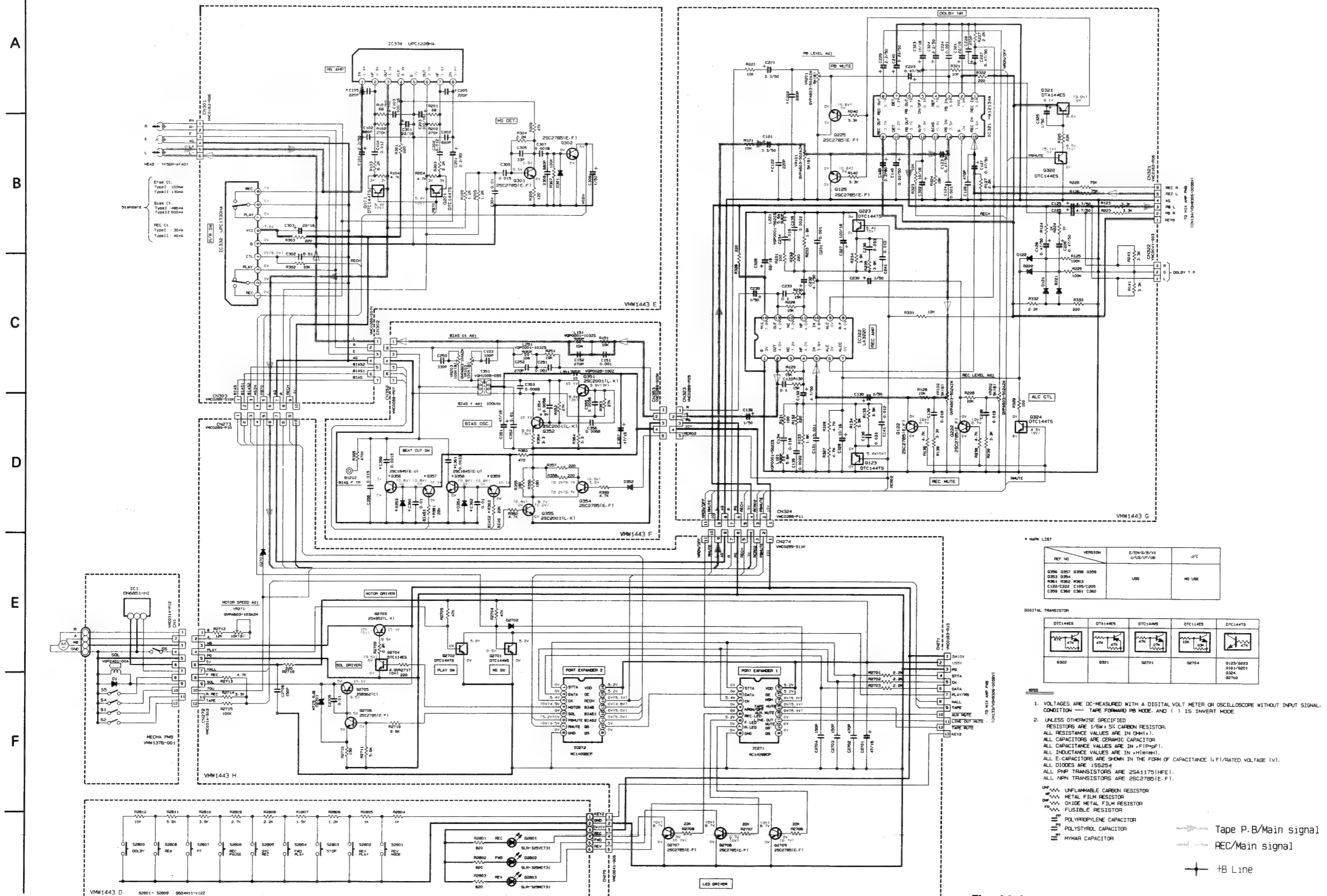


Fig. 11-1







Note : VDH9306005PV(I/s/G)

A  
—  
B  
—  
C  
—  
D  
—  
E  
—  
F



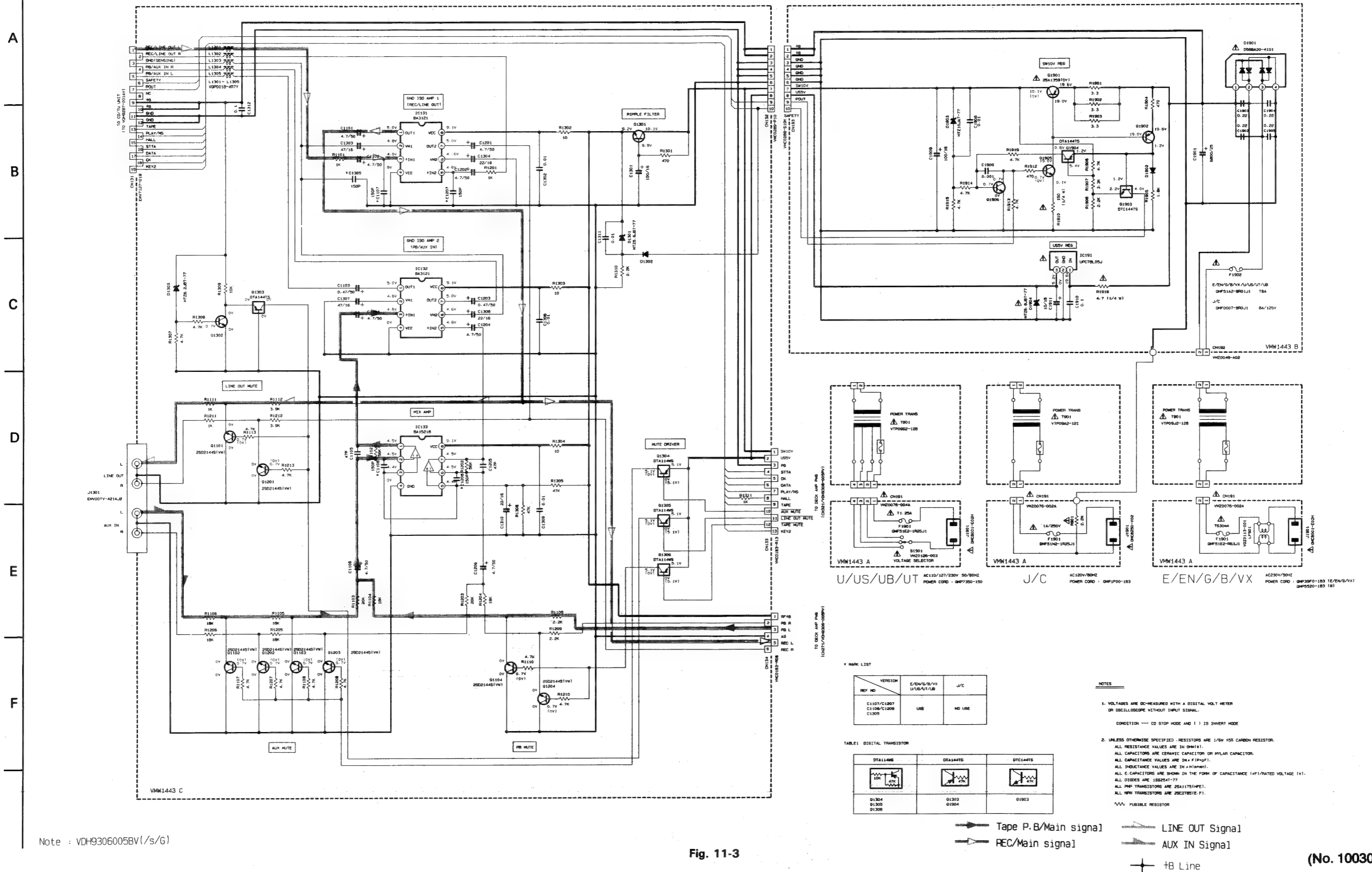
UN003

ALL INDUCTANCE VALUES ARE IN  $\mu$ H (M=MH).  
ALL E-CAPACITORS ARE SHOWN IN THE FORM  
OF CAPACITANCE (A/F)/RATED VOLTAGE (V).  
ALL DIODES ARE 1SS254 (OR HSS104TJ OR MA165  
ALL NPN TRANSISTOR ARE 2SC2785(E,F)  
ALL PNP TRANSISTOR ARE 2SA1175(HF)

 Tape P.B/Main signal       FM Radio signal  
 REC/Main signal       MIC Input signal  
 CD Analogue signal       +B Line

**Fig. 11-2**

**Line Amplifier & Power Source Circuit: Drawing No. VDH9306-005BV**



**Fig. 11-3**

1 2 3 4 5 6 7 8 9 10

■ LCD & Operation Switch/System CPU Circuit: Drawing No. VDH9306-005SV

A

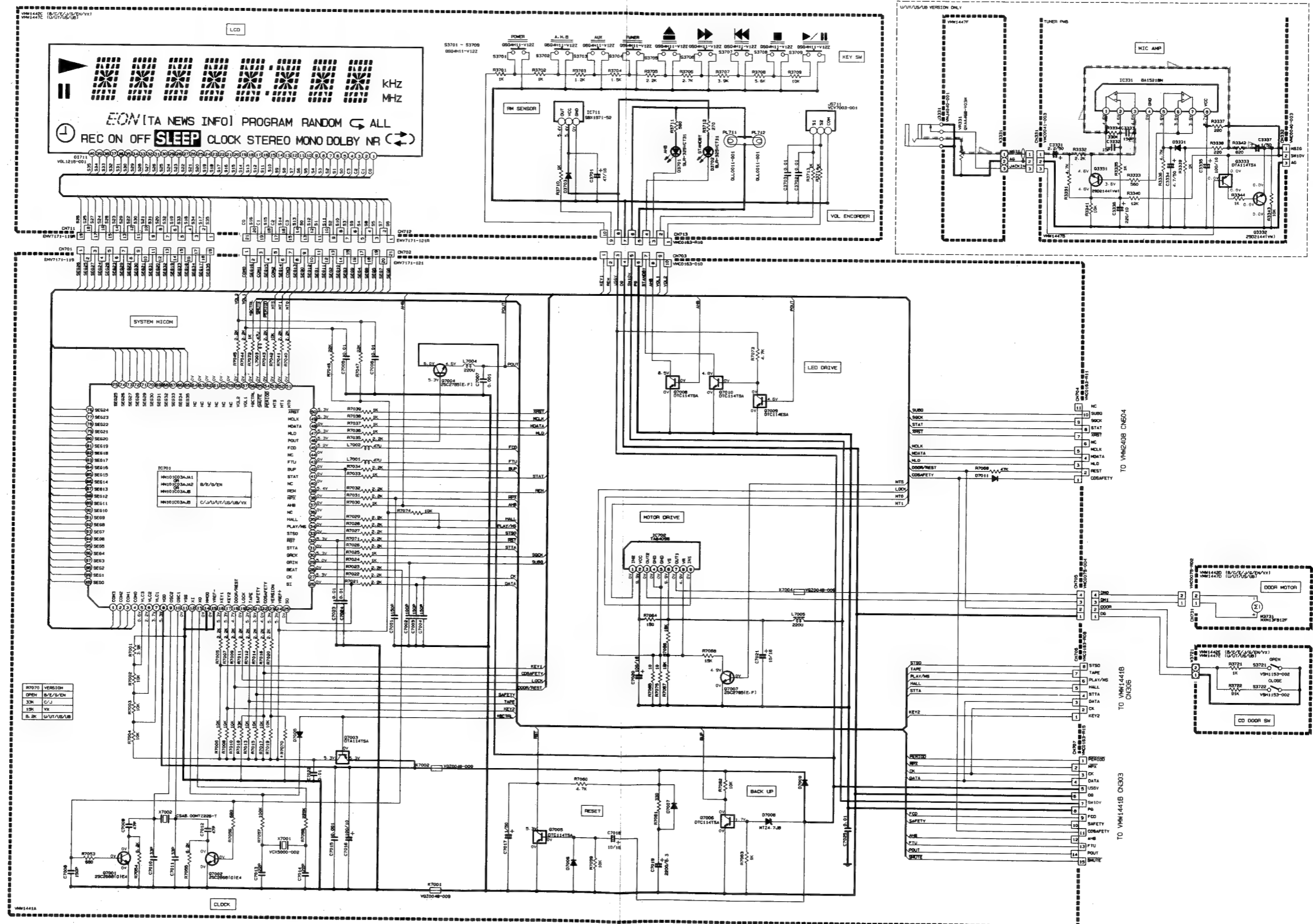
B

C

D

E

F



Notes: 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.  
CONDITION — CD STOP MODE

Note: VDH9306005SV1/s/G

2. UNLESS OTHERWISE SPECIFIED  
RESISTORS ARE 1/8W 10% CARBON RESISTOR.  
ALL RESISTANCE VALUES ARE IN OHM (Ω).  
ALL CAPACITANCE VALUES ARE IN PICO (pF).  
ALL INDUCTANCE VALUES ARE IN MILLI (mH).  
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (pF)/RATED VOLTAGE (V).  
ALL DIODES ARE 1SS254 (OR HSS104TJ OR M4165)

TABLE: DIGITAL TRANSISTOR

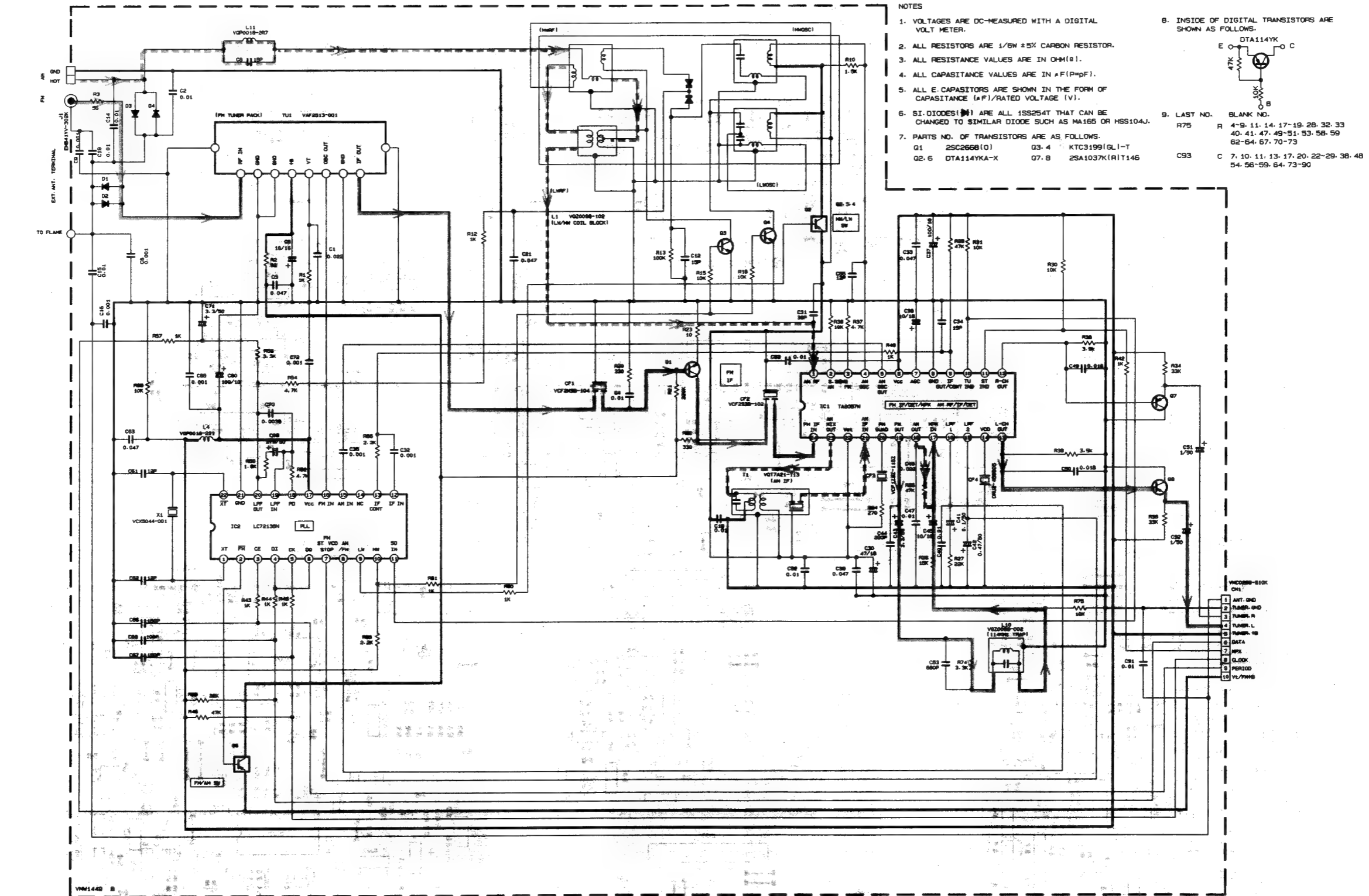


(No. 10030) 60

Fig. 11-4

MIC Input signal  
+B Line

Tuner Circuit: Drawing No. VDH9306-005TW



CONDITION	PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
FM NO SIGNAL	IC1	2.0	0.5	0	2.0	5.1	5.1	0	0	0.3	5.1	5.1	1.1	1.1	4.4	3.7	3.7	1.4	0	1.3	1.1	2.0	2.0	5.1	2.0
FM 60dB STEREO	IC1	2.0	0.5	0	2.0	5.1	5.1	1.1	0	0.3	0	0	1.1	1.1	4.3	4.1	3.7	1.4	0	1.4	1.1	2.0	2.0	5.1	2.0
AM NO SIGNAL	IC1	2.0	0.5	0	2.0	5.1	5.1	0	0	0.3	5.1	5.1	1.1	1.1	4.5	0.1	0	1.4	1.4	1.5	1.6	2.0	2.0	5.1	2.0
FM NO SIGNAL	IC2	2.4	0	0	1.1	5.0	1.1	3.7	3.7	2.0	3.8	5.1	0	0	0	0	2.6	5.1	1.0	1.0	3.7	0	2.7		

Fig. 11-5

Tr. NO.	Q1				Q6				Q7				Q8			
PIN NO.	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	
FM 87.5MHz NO SIGNAL	0	8.5	0.7	10.0	0	9.9	0	1.6	0	1.1	1.6	0	1.1			
AM 522kHz NO SIGNAL	0	0	0	10.0	0	9.9	1.6	0	1.1	1.6	0	1.1				
Tr. NO.	Q2				Q3				Q4							
PIN NO.	E	C	B	E	C	B	E	C	B	E	C	B				
AM 522kHz NO SIGNAL	2.0	2.0	0.1	0	0	0.7	0	0	0.7							
AM 144kHz NO SIGNAL	2.0	2.0	2.0	0	0	0.1	0	0	0.1							

FM Radio signal  
AM Radio signal  
+B Line

Note : VDH9306005TW(/s/G)

# 12. Location of P. C. Board Parts

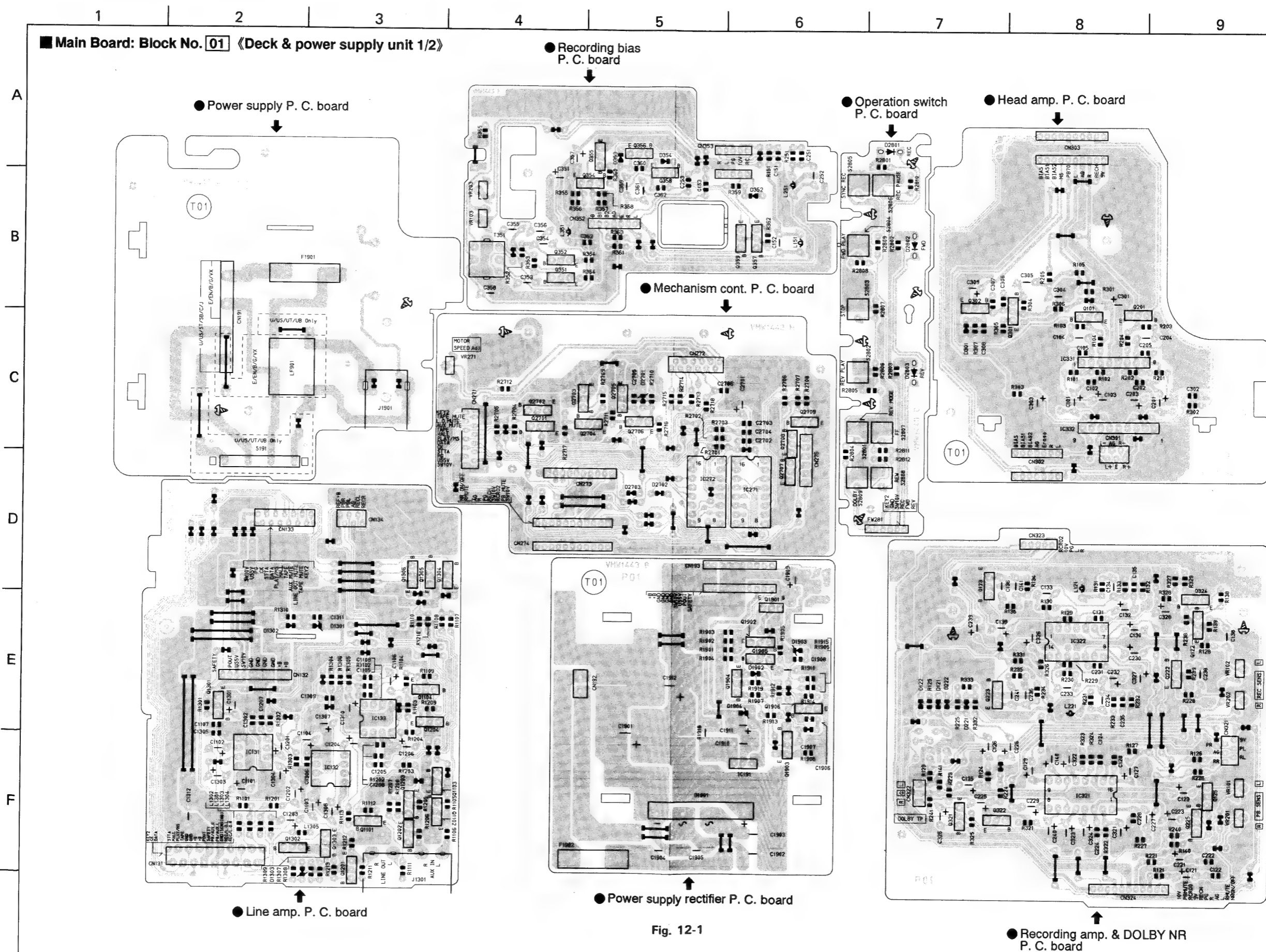
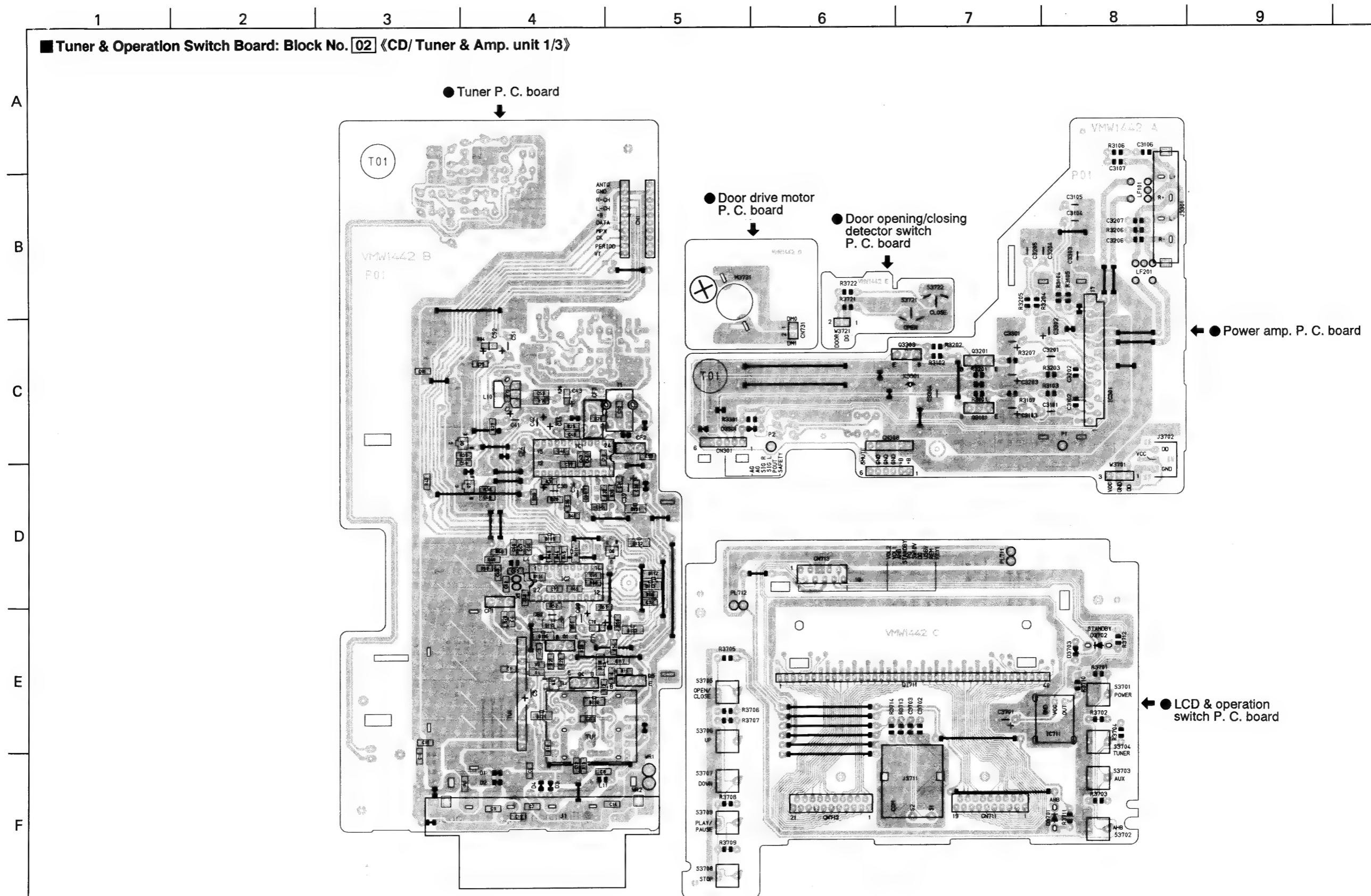


Fig. 12-1



**Fig. 12-2**

## ■ System CPU &amp; Function Board: Block No. 03 《CD/ Tuner &amp; Amp. unit 2/3》

A  
B  
C  
D  
E  
F

1

2

3

4

5

6

7

8

9

10

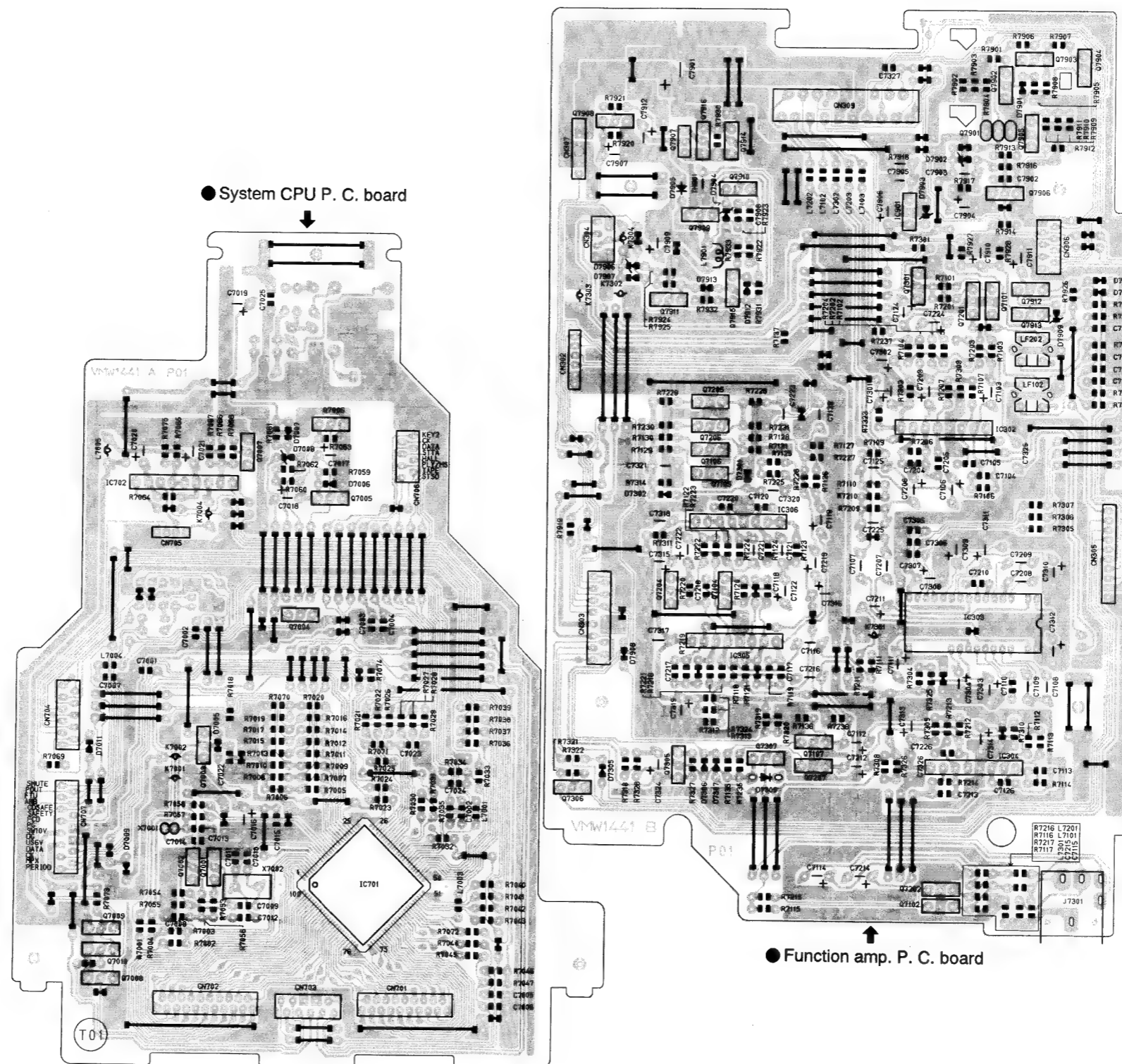


Fig. 12-3

■ CD Servo Control Board: Block No. 04 《CD/ Tuner & Amp. unit 3/3》

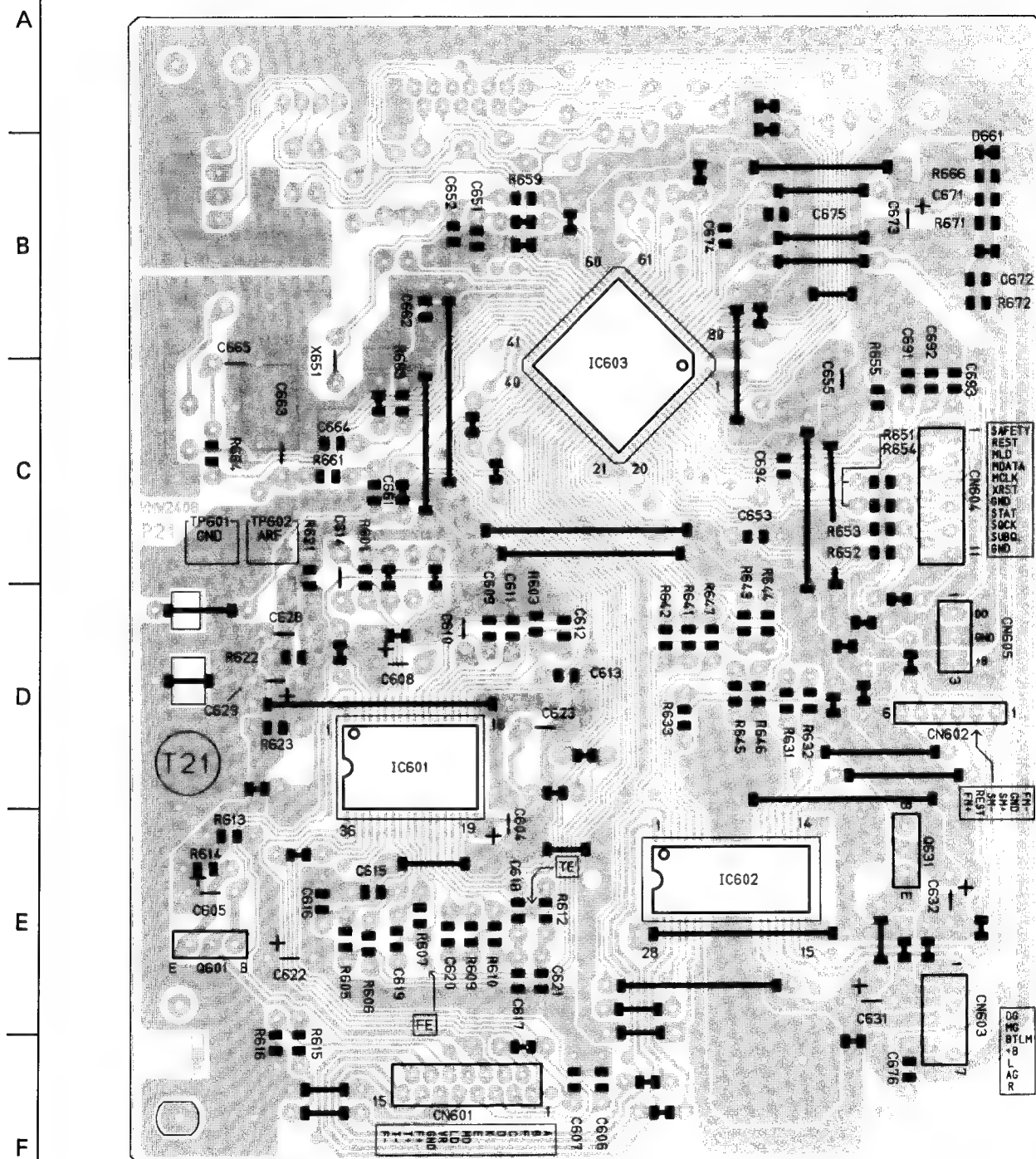
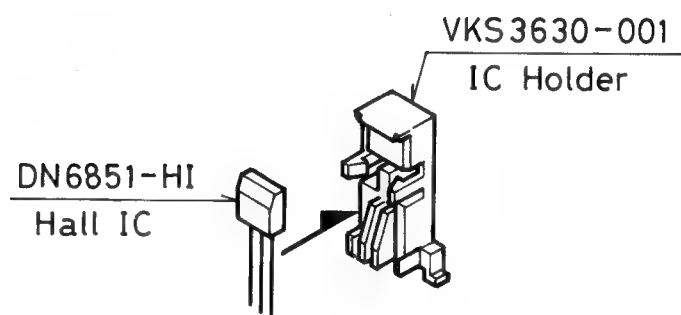
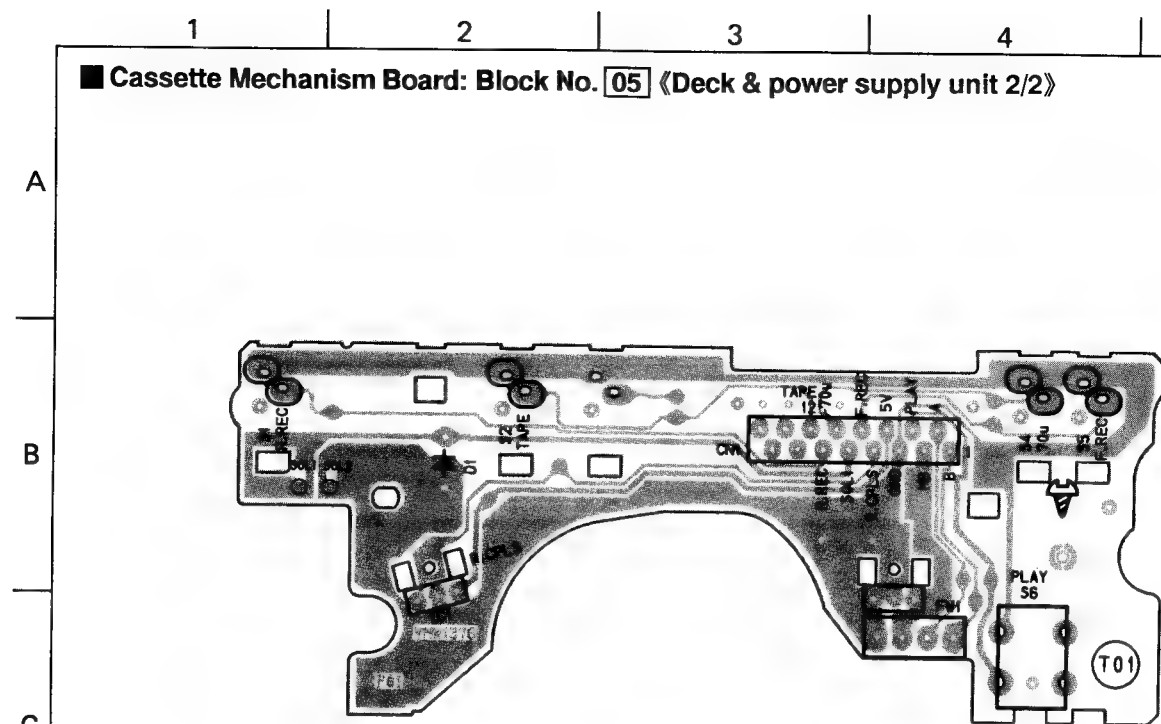


Fig. 12-4



**Fig. 12-5**

# 13. Electrical Parts List

## Main Board

BLOCK NO. 01						BLOCK NO. 01					
A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 101	QEK41HM-225	E.CAPACITOR	PB AMP			C 253	QCB81HK-331Y	C.CAPACITOR	BIAS OSC	
	C 102	QCB81HK-681Y	E.CAPACITOR	PB AMP			C 301	QEK41CM-226	E.CAPACITOR	PB AMP	
	C 103	QEK61CM-107ZN	E.CAPACITOR	PB AMP			C 302	QCVB1CM-103Y	E.CAPACITOR	R/P SW	
	C 104	QFV41HJ-123ZM	FILM CAPACITOR	PB AMP			C 303	QEK41CM-226	E.CAPACITOR	R/P SW	
	C 105	QCB81HK-221Y	E.CAPACITOR	PB AMP			C 304	QFV71HJ-103	FILM CAPACITOR	MS DET	
	C 121	QER61HM-335ZM	E.CAPACITOR	DOLBY AMP			C 305	QFV41HJ-153ZM	FILM CAPACITOR	MS DET	
	C 122	QCB81HK-221Y	E.CAPACITOR	DOLBY AMP			C 306	QCS11HJ-330	C.CAPACITOR	MS DET	
	C 123	QEK41HM-474	E.CAPACITOR	DOLBY AMP			C 307	QCB81CM-182Y	C.CAPACITOR	MS DET	
	C 124	QCB81HK-102Y	E.CAPACITOR	DOLBY AMP			C 308	QCB81HK-681Y	C.CAPACITOR	MS DET	
	C 125	QEK51HM-475	E.CAPACITOR	DOLBY AMP			C 309	QEK41HM-105	E.CAPACITOR	MS DET	
	C 126	QEK41HM-474	E.CAPACITOR	DOLBY AMP			C 321	QEK41CM-226	E.CAPACITOR	DOLBY AMP	
	C 127	QEK41HM-474	E.CAPACITOR	ALC			C 322	QEK41CM-106	E.CAPACITOR	DOLBY AMP	
	C 128	QCB81HK-471Y	E.CAPACITOR	DOLBY AMP			C 323	QEK41CM-106	E.CAPACITOR	DOLBY AMP	
	C 129	QEK41HM-225	E.CAPACITOR	DOLBY AMP			C 324	QEK41HM-225	E.CAPACITOR	DOLBY AMP	
	C 130	QEK41HM-105	E.CAPACITOR	REC AMP			C 325	QEK41HM-105	E.CAPACITOR	DOLBY AMP	
	C 131	QCB81HK-102Y	E.CAPACITOR	REC AMP			C 326	QEK41CM-226	E.CAPACITOR	REC AMP	
	C 132	QEK51HM-475	E.CAPACITOR	REC AMP			C 327	QEK61CM-107ZN	E.CAPACITOR	REC AMP	
	C 133	QFV41HJ-104ZM	FILM CAPACITOR	REC AMP			C 328	QEK41CM-106	E.CAPACITOR	REC AMP	
	C 134	QFV81HJ-183	FILM CAPACITOR	REC AMP			C 351	QEK41CM-476	E.CAPACITOR	BIAS OSC	
	C 135	QCB81CM-222Y	E.CAPACITOR	REC AMP			C 352	QCVB1CM-103Y	C.CAPACITOR	BIAS OSC	
	C 136	QFV41HJ-333	FILM CAPACITOR	REC AMP			C 353	QFN41HJ-682	M.CAPACITOR	BIAS OSC	
	C 138	QFV81HJ-183	FILM CAPACITOR	REC AMP			C 354	QFN81HJ-562	M.CAPACITOR	BIAS OSC	
	C 139	QEK41HM-105	E.CAPACITOR	REC AMP			C 355	QFN81HJ-562	M.CAPACITOR	BIAS OSC	
	C 140	QEK41HM-224	E.CAPACITOR	DOLBY AMP			C 356	QFN41HJ-682	M.CAPACITOR	BIAS OSC	
	C 141	QFV41HJ-123ZM	FILM CAPACITOR	REC AMP			C 357	QEK41CM-476	E.CAPACITOR	BIAS OSC	
	C 151	QCB81HK-102Y	E.CAPACITOR	BIAS OSC			C 358	QFP32AJ-153ZM	PP.CAPACITOR	BEAT CUT	
	C 152	QCS11HJ-271	E.CAPACITOR	BIAS OSC			C 359	QFN81HJ-152	M.CAPACITOR	BEAT CUT	
	C 153	QCB81HK-331Y	E.CAPACITOR	BIAS OSC			C 360	QCVB1CM-103Y	E.CAPACITOR	BEAT CUT	
	C 201	QEK41HM-225	E.CAPACITOR	PB AMP			C 361	QFN41HJ-332	M.CAPACITOR	BEAT CUT	
	C 202	QCB81HK-681Y	E.CAPACITOR	PB AMP			C 362	QCVB1CM-103Y	C.CAPACITOR	BEAT CUT	
	C 203	QEK61CM-107ZN	E.CAPACITOR	PB AMP			CN131	ENV7127-019	19P CONNECTOR		
	C 204	QFV41HJ-123ZM	FILM CAPACITOR	PB AMP			CN132	VMC0289-P10	CONNECTOR		
	C 205	QCB81HK-221Y	E.CAPACITOR	PB AMP			CN133	VMC0163-R13	CONNECTOR		
	C 221	QER61HM-335ZM	E.CAPACITOR	DOLBY AMP			CN134	VMC0163-R06	CONNECTOR		
	C 222	QCB81HK-221Y	E.CAPACITOR	DOLBY AMP		A	CN191	VMZ0076-002A	CONNECTOR		
	C 223	QEK41HM-474	E.CAPACITOR	DOLBY AMP			CN192	VMZ0049-A02	CONNECTOR		
	C 224	QCB81HK-102Y	E.CAPACITOR	DOLBY AMP			CN193	VMC0289-S10K	CONNECTOR		
	C 225	QEK51HM-475	E.CAPACITOR	DOLBY AMP			CN271	VMC0163-R13	CONNECTOR		
	C 226	QEK41HM-474	E.CAPACITOR	DOLBY AMP			CN272	VMC0314-S12	CONNECTOR		
	C 227	QEK41HM-474	E.CAPACITOR	ALC			CN273	VMC0289-P10	CONNECTOR		
	C 228	QCB81HK-471Y	E.CAPACITOR	DOLBY AMP			CN274	VMC0289-S11K	CONNECTOR		
	C 229	QEK41HM-225	E.CAPACITOR	DOLBY AMP			CN275	VMC0041-006	CONNECTOR		
	C 230	QEK41HM-105	E.CAPACITOR	REC AMP			CN301	VMC0163-R06	CONNECTOR		
	C 231	QCB81HK-102Y	E.CAPACITOR	REC AMP			CN302	VMC0289-S07	CONNECTOR		
	C 232	QEK51HM-475	E.CAPACITOR	REC AMP			CN303	VMC0289-S10K	CONNECTOR		
	C 233	QFV41HJ-104ZM	FILM CAPACITOR	REC AMP			CN321	VMC0163-R06	CONNECTOR		
	C 234	QFV81HJ-183	FILM CAPACITOR	REC AMP			CN322	VMC0041-003	CONNECTOR		
	C 235	QCB81CM-222Y	E.CAPACITOR	REC AMP			CN323	VMC0289-P05	CONNECTOR		
	C 236	QFV41HJ-333	FILM CAPACITOR	REC AMP			CN324	VMC0289-P11	CONNECTOR		
	C 238	QFV81HJ-183	FILM CAPACITOR	REC AMP			CN352	VMC0289-P07	CONNECTOR		
	C 239	QEK41HM-105	E.CAPACITOR	REC AMP			CN353	VMC0289-S05K	CONNECTOR		
	C 240	QEK41HM-224	E.CAPACITOR	DOLBY AMP			C1101	QEK51HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C 241	QFV41HJ-123ZM	FILM CAPACITOR	REC AMP			C1102	QEK51HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C 251	QCB81HK-102Y	E.CAPACITOR	BIAS OSC			C1103	QEK41HM-474	E.CAPACITOR	4.7MF 20% 50V	
	C 252	QCS11HJ-271	E.CAPACITOR	BIAS OSC			C1104	QEK51HM-475	E.CAPACITOR	4.7MF 20% 50V	

BLOCK NO. 01

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C1105	QCS11HJ-470	C. CAPACITOR	MIX AMP	
C1106	QEK51HM-475	E. CAPACITOR	MIX AMP	
C1107	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
C1108	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
C1201	QEK51HM-475	E. CAPACITOR	4.7MF 20% 50V	
C1202	QEK51HM-475	E. CAPACITOR	4.7MF 20% 50V	
C1203	QEK41HM-474	E. CAPACITOR	4.7MF 20% 50V	
C1204	QEK51HM-475	E. CAPACITOR	4.7MF 20% 50V	
C1205	QCS11HJ-470	C. CAPACITOR	MIX AMP	
C1206	QEK51HM-475	E. CAPACITOR	MIX AMP	
C1207	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
C1208	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
C1301	QEK51CM-107	E. CAPACITOR	RIPPLE FILTER	
C1302	QCVB1CM-103Y	C. CAPACITOR	-010MF 20% 16V	
C1303	QEK41CM-476	E. CAPACITOR	47MF 20% 16V	
C1304	QEK41CM-226	E. CAPACITOR	22MF 20% 16V	
C1305	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
C1306	QCVB1CM-103Y	C. CAPACITOR	-010MF 20% 16V	
C1307	QEK41CM-476	E. CAPACITOR	47MF 20% 16V	
C1308	QEK41CM-226	E. CAPACITOR	22MF 20% 16V	
C1309	QCVB1CM-103Y	C. CAPACITOR	MIX AMP	
C1310	QEK41CM-226	E. CAPACITOR	MIX AMP	
C1311	QCVB1CM-103Y	C. CAPACITOR	-010MF 20% 16V	
C1312	QFV41HJ-1047M	FILM CAPACITOR	-10MF 5% 50V	
C1901	QETM1EM-688	E. CAPACITOR	6800MF 20% 25V	
C1902	QFV41HJ-224	FILM CAPACITOR	-22MF 5% 50V	
C1903	QFV41HJ-224	FILM CAPACITOR	-22MF 5% 50V	
C1904	QFV41HJ-224	FILM CAPACITOR	-22MF 5% 50V	
C1905	QFV41HJ-224	FILM CAPACITOR	-22MF 5% 50V	
C1906	QCB81HK-102Y	C. CAPACITOR	SW10V	
C1908	QCVB1CM-103Y	C. CAPACITOR	SW10V	
C1909	QEK51CM-107	E. CAPACITOR	SW10V	
C1910	QFV41HJ-1047M	FILM CAPACITOR	US5V	
C1911	QEK41CM-106	E. CAPACITOR	US5V	
C2701	QEK41CM-476	E. CAPACITOR	47MF 20% 16V	
C2702	QCB81HK-471Y	C. CAPACITOR	470PF 10% 50V	
C2703	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
C2704	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
C2705	QCVB1CM-103Y	C. CAPACITOR	SOL DRIVER	
C2706	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
D 121	1SS133	SI DIODE	ALC	
D 122	1SS133	SI DIODE	ALC	
D 221	1SS133	SI DIODE	ALC	
D 222	1SS133	SI DIODE	ALC	
D 301	1SS133	SI DIODE	ALC	
D 352	1SS133	SI DIODE	ALC	
D 353	1SS133	SI DIODE	ALC	
D 354	1SS133	SI DIODE	ALC	
D1301	MT75-6JB	ZENER DIODE		
D1302	1SS133	SI DIODE		
D1303	MT78-2JB	ZENER DIODE		
D1901	D5SBA20-4101	SI DIODE		
D1902	1SS133	SI DIODE		
D1903	MT10JAT-77	ZENER DIODE		
D1904	MT26-8JB	ZENER DIODE		

BLOCK NO. 02

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
D2701	MT75-6JB	ZENER DIODE	SOL DRIVER	
D2702	1SS133	SI DIODE		
D2703	1SS133	SI DIODE		
D2801	SLR-325VCT31	LED	REC	
D2802	SLR-325VCT31	LED	FWD	
D2803	SLR-325VCT31	LED	REV	
IC131	BA3121	IC		
IC132	BA3121	IC		
IC133	BA15218	IC	MIX AMP	
IC191	UPC78L05J-T	IC	USSV	
IC271	MC14094BCP	IC	PORT EXPANDER1	
IC272	MC14094BCP	IC	PORT EXPANDER2	
IC321	HA12134A	IC	DOLBY AMP	
IC322	LA5220	IC	REC AMP	
IC331	UPC1228HA	IC	PB AMP	
IC332	UPC1330HA	IC	R/P SW	
J1301	ENM00TV-421AJ2	PIN JACK	AUX/LINE.OUT	
J1901	QMCB001-E02H	AC SOCKET		
L 121	VGPO001-562ZS	INDUCTOR	REC AMP	
L 151	VGPO001-103S	INDUCTOR		
L 221	VGPO001-562ZS	INDUCTOR	REC AMP	
L 251	VGPO001-103S	INDUCTOR		
L 351	VGPO028-100Z	INDUCTOR	BIAS OSC	
LF901	VG20113-001	INDUCTOR		
L1301	VGPO018-4R7	INDUCTOR		
L1302	VGPO018-4R7	INDUCTOR		
L1303	VGPO018-4R7	INDUCTOR		
L1304	VGPO018-4R7	INDUCTOR		
L1305	VGPO018-4R7	INDUCTOR		
PP 1	VM20015-011	STYLE PIN		
PP 5	VM20015-011	STYLE PIN		
Q 101	DTC144TSA-T	D. TRANSISTOR	PB AMP	
Q 122	2SC2785	TRANSISTOR	REC MUTE	
Q 123	DTC144TSA-T	D. TRANSISTOR	REC AMP	
Q 125	2SC2785	TRANSISTOR	PB MUTE	
Q 201	DTC144TSA-T	D. TRANSISTOR	PB AMP	
Q 222	2SC2785	TRANSISTOR	REC MUTE	
Q 223	DTC144TSA-T	D. TRANSISTOR	REC AMP	
Q 225	2SC2785	TRANSISTOR	PB MUTE	
Q 301	2SC2785	TRANSISTOR	MS DET	
Q 302	2SC2785	TRANSISTOR	MS DET	
Q 321	DTA144ES	D. TRANSISTOR	PB MUTE	
Q 322	DTC144ESA-T	D. TRANSISTOR	PB MUTE	
Q 324	DTC144TSA-T	D. TRANSISTOR	ALC CTL	
Q 351	2SC2001(L,K)	TRANSISTOR	BIAS OSC	
Q 352	2SC2001(L,K)	TRANSISTOR	BIAS OSC	
Q 354	2SC2785	TRANSISTOR	BIAS OSC	
Q 355	2SC2001(L,K)	TRANSISTOR	BIAS OSC	
Q 356	2SC1845	TRANSISTOR	BEAT CUT	
Q 357	2SC2785	TRANSISTOR	BEAT CUT	
Q 358	2SC1845	TRANSISTOR	BEAT CUT	
Q 359	2SC2785	TRANSISTOR	BEAT CUT	
Q1101	2SD2144S(VW)	TRANSISTOR	LINE OUT	
Q1102	2SD2144S(VW)	TRANSISTOR	AUX MUTE	
Q1103	2SD2144S(VW)	TRANSISTOR	AUX MUTE	

BLOCK NO. 01				
A	REF.	PARTS NO.	PARTS NAME	SUFFIX
	Q1104	2SD2144S(VW)	TRANSISTOR	TAPE MUTE
	Q1201	2SD2144S(VW)	TRANSISTOR	LINE OUT MUTE
	Q1202	2SD2144S(VW)	TRANSISTOR	AUX MUTE
	Q1203	2SD2144S(VW)	TRANSISTOR	AUX MUTE
	Q1204	2SD2144S(VW)	TRANSISTOR	TAPE MUTE
	Q1301	2SC2785	TRANSISTOR	LIPPLE FILTER
	Q1302	2SC2785	TRANSISTOR	
	Q1303	DTA144TSTP	TRANSISTOR	
	Q1304	DTA114WS	D.TRANSISTOR	MUTE DRIVE
	Q1305	DTA114WS	D.TRANSISTOR	MUTE DRIVE
	Q1306	DTA114WS	D.TRANSISTOR	MUTE DRIVE
	Q1901	2SA1359(OV)	TRANSISTOR	
	Q1902	2SA1175	TRANSISTOR	
	Q1903	DTA144TSA-T	D.TRANSISTOR	
	Q1904	DTA144TSTP	TRANSISTOR	
	Q1905	2SC2785	TRANSISTOR	
	Q1906	2SC2785	TRANSISTOR	MS SW
	Q2701	DTA144WSTP	TRANSISTOR	PLAY SW
	Q2702	DTA144TSA-T	D.TRANSISTOR	MOT DRIVER
	Q2703	2SA952(L-K)	TRANSISTOR	
	Q2704	DTA144ESA-T	D.TRANSISTOR	MOT DRIVER
	Q2705	2SB562(C)	TRANSISTOR	SOL DRIVER
	Q2706	2SC2785	TRANSISTOR	SOL DRIVER
	Q2707	2SC2785	TRANSISTOR	LED DRIVER
	Q2708	2SC2785	TRANSISTOR	LED DRIVER
	Q2709	2SC2785	TRANSISTOR	LED DRIVER
	R 101	QRD161J-680	CARBON RESISTOR	PB AMP
	R 102	QRD161J-274	CARBON RESISTOR	PB AMP
	R 103	QRD161J-622	CARBON RESISTOR	PB AMP
	R 104	QRD161J-472	CARBON RESISTOR	PB AMP
	R 105	QRD161J-122	CARBON RESISTOR	MS DET
	R 121	QRD161J-103	CARBON RESISTOR	DOLBY AMP
	R 123	QRD167J-332	CARBON RESISTOR	DOLBY AMP
	R 124	QRD161J-102	CARBON RESISTOR	ALC
	R 125	QRD161J-104	CARBON RESISTOR	ALC
	R 126	QRD161J-753	CARBON RESISTOR	DOLBY AMP
	R 127	QRD161J-222	CARBON RESISTOR	DOLBY AMP
	R 128	QRD161J-103	CARBON RESISTOR	REC AMP
	R 129	QRD161J-153	CARBON RESISTOR	REC AMP
	R 130	QRD161J-153	CARBON RESISTOR	REC AMP
	R 131	QRD161J-101	CARBON RESISTOR	REC AMP
	R 132	QRD161J-221	CARBON RESISTOR	REC AMP
	R 133	QRD161J-182	CARBON RESISTOR	REC AMP
	R 134	QRD161J-392	CARBON RESISTOR	REC AMP
	R 135	QRD161J-392	CARBON RESISTOR	REC AMP
	R 138	QRD161J-472	CARBON RESISTOR	REC AMP
	R 139	QRD167J-332	CARBON RESISTOR	REC AMP
	R 140	QRD167J-332	CARBON RESISTOR	DOLBY AMP
	R 141	QRD167J-332	CARBON RESISTOR	DOLBY AMP
	R 151	QRD161J-103	CARBON RESISTOR	BIAS OSC
	R 201	QRD161J-680	CARBON RESISTOR	PB AMP
	R 202	QRD161J-274	CARBON RESISTOR	PB AMP
	R 203	QRD161J-622	CARBON RESISTOR	PB AMP
	R 204	QRD161J-472	CARBON RESISTOR	PB AMP
	R 205	QRD161J-122	CARBON RESISTOR	MS DET

BLOCK NO. 01				
A	REF.	PARTS NO.	PARTS NAME	SUFFIX
	R 221	QRD161J-103	CARBON RESISTOR	DOLBY AMP
	R 223	QRD167J-332	CARBON RESISTOR	DOLBY AMP
	R 224	QRD161J-102	CARBON RESISTOR	ALC
	R 225	QRD161J-104	CARBON RESISTOR	ALC
	R 226	QRD161J-753	CARBON RESISTOR	DOLBY AMP
	R 227	QRD161J-222	CARBON RESISTOR	DOLBY AMP
	R 228	QRD161J-103	CARBON RESISTOR	REC AMP
	R 229	QRD161J-153	CARBON RESISTOR	REC AMP
	R 230	QRD161J-153	CARBON RESISTOR	REC AMP
	R 231	QRD161J-101	CARBON RESISTOR	REC AMP
	R 232	QRD161J-221	CARBON RESISTOR	REC AMP
	R 233	QRD161J-182	CARBON RESISTOR	REC AMP
	R 234	QRD161J-392	CARBON RESISTOR	REC AMP
	R 235	QRD161J-392	CARBON RESISTOR	REC AMP
	R 238	QRD161J-472	CARBON RESISTOR	REC AMP
	R 239	QRD167J-332	CARBON RESISTOR	REC AMP
	R 240	QRD167J-332	CARBON RESISTOR	DOLBY AMP
	R 241	QRD167J-332	CARBON RESISTOR	DOLBY AMP
	R 251	QRD161J-103	CARBON RESISTOR	BIAS OSC
	R 301	QRD161J-221	CARBON RESISTOR	PB AMP
	R 302	QRD161J-103	CARBON RESISTOR	R/P SW
	R 303	QRD161J-221	CARBON RESISTOR	R/P SW
	R 304	QRD161J-225	CARBON RESISTOR	MS DET
	R 305	QRD161J-121	CARBON RESISTOR	MS DET
	R 306	QRD161J-473	CARBON RESISTOR	MS DET
	R 307	QRD161J-104	CARBON RESISTOR	MS DET
	R 321	QRD161J-103	CARBON RESISTOR	DOLBY AMP
	R 322	QRD161J-221	CARBON RESISTOR	DOLBY AMP
	R 323	QRD161J-103	CARBON RESISTOR	DOLBY AMP
	R 324	QRD161J-183	CARBON RESISTOR	DOLBY AMP
	R 325	QRD161J-223	CARBON RESISTOR	DOLBY AMP
	R 326	QRD161J-221	CARBON RESISTOR	REC AMP
	R 327	QRD161J-475	CARBON RESISTOR	REC AMP
	R 328	QRD161J-475	CARBON RESISTOR	REC AMP
	R 329	QRD161J-101	CARBON RESISTOR	REC AMP
	R 331	QRD161J-103	CARBON RESISTOR	REC AMP
	R 332	QRD161J-222	CARBON RESISTOR	REC AMP
	R 333	QRD161J-221	CARBON RESISTOR	REC AMP
	R 352	QRD161J-273	CARBON RESISTOR	BIAS OSC
	R 353	QRD161J-273	CARBON RESISTOR	BIAS OSC
	R 354	QRD161J-3R3	CARBON RESISTOR	BIAS OSC
	R 355	QRD161J-181	CARBON RESISTOR	BIAS OSC
	R 356	QRD161J-181	CARBON RESISTOR	BIAS OSC
	R 357	QRD161J-221	CARBON RESISTOR	BIAS OSC
	R 358	QRD161J-221	CARBON RESISTOR	BIAS OSC
	R 359	QRD161J-472	CARBON RESISTOR	BIAS OSC
	R 360	QRD161J-472	CARBON RESISTOR	BIAS OSC
	R 361	QRD161J-223	CARBON RESISTOR	BEAT CUT
	R 362	QRD161J-471	CARBON RESISTOR	BEAT CUT
	R 363	QRD161J-223	CARBON RESISTOR	BEAT CUT
	R 364	QRD161J-3R3	CARBON RESISTOR	BIAS OSC
	R 365	QRD161J-474	CARBON RESISTOR	BIAS T-P
	R1101	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W
	R1102	QRD161J-563	CARBON RESISTOR	MIX AMP
	R1103	QRD161J-203	CARBON RESISTOR	MIX AMP

BLOCK NO. 01					BLOCK NO. 01				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R1104	QRD161J-183	CARBON RESISTOR	MIX AMP		R2707	QRD161J-223	CARBON RESISTOR	LED DRIVER	
R1105	QRD161J-183	CARBON RESISTOR	AUX MUTE		R2708	QRD161J-223	CARBON RESISTOR	LED DRIVER	
R1106	QRD161J-183	CARBON RESISTOR	AUX MUTE		R2709	QRD161J-222	CARBON RESISTOR	MOT DRIVER	
R1107	QRD161J-472	CARBON RESISTOR	AUX MUTE		R2710	QRD161J-151	CARBON RESISTOR	SOL DRIVER	
R1108	QRD161J-472	CARBON RESISTOR	AUX MUTE		R2711	QRD161J-562	CARBON RESISTOR	SOL DRIVER	
R1109	QRD161J-332	CARBON RESISTOR	TAPE MUTE		R2712	QRD161J-123	CARBON RESISTOR	MOT SPEED ADJ	
R1110	QRD161J-472	CARBON RESISTOR	TAPE MUTE		R2713	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R1111	QRD161J-102	CARBON RESISTOR	LINE OUT MUTE		R2714	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R1112	QRD161J-392	CARBON RESISTOR	LINE OUT MUTE		R2715	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R1113	QRD161J-472	CARBON RESISTOR	LINE OUT MUTE		R2716	QRD161J-682	CARBON RESISTOR	SOL DRIVER	
R1201	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W		R2717	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R1202	QRD161J-563	CARBON RESISTOR	MIX AMP		R2718	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R1203	QRD161J-203	CARBON RESISTOR	MIX AMP		R2801	QRD161J-821	CARBON RESISTOR	REC LED	
R1204	QRD161J-183	CARBON RESISTOR	MIX AMP		R2802	QRD161J-821	CARBON RESISTOR	FWD LED	
R1205	QRD161J-183	CARBON RESISTOR	AUX MUTE		R2803	QRD161J-821	CARBON RESISTOR	REV LED	
R1206	QRD161J-183	CARBON RESISTOR	AUX MUTE		R2804	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R1207	QRD161J-472	CARBON RESISTOR	AUX MUTE		R2805	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R1208	QRD161J-472	CARBON RESISTOR	AUX MUTE		R2806	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R1209	QRD161J-332	CARBON RESISTOR	TAPE MUTE		R2807	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R1210	QRD161J-472	CARBON RESISTOR	TAPE MUTE		R2808	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R1211	QRD161J-102	CARBON RESISTOR	LINE OUT MUTE		R2809	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R1212	QRD161J-392	CARBON RESISTOR	LINE OUT MUTE		R2810	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R1213	QRD161J-472	CARBON RESISTOR	LINE OUT MUTE		R2811	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R1301	QRD161J-471	CARBON RESISTOR	RIPLER FILTER		R2812	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R1302	QRD161J-100	CARBON RESISTOR	10 5% 1/6W		S2801	QSQ4H11-V12Z	TACT SWITCH	REV MODE	
R1303	QRD161J-100	CARBON RESISTOR	10 5% 1/6W		S2802	QSQ4H11-V12Z	TACT SWITCH	REV PLAY	
R1304	QRD161J-100	CARBON RESISTOR	MIX AMP		S2803	QSQ4H11-V12Z	TACT SWITCH	STOP	
R1305	QRD161J-473	CARBON RESISTOR	MIX AMP		S2804	QSQ4H11-V12Z	TACT SWITCH	FWD PLAY	
R1306	QRD161J-473	CARBON RESISTOR	MIX AMP		S2805	QSQ4H11-V12Z	TACT SWITCH	SYNC REC	
R1307	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		S2806	QSQ4H11-V12Z	TACT SWITCH	REC PAUSE	
R1308	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		S2807	QSQ4H11-V12Z	TACT SWITCH	FF	
R1309	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		S2808	QSQ4H11-V12Z	TACT SWITCH	REW	
R1310	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		S2809	QSQ4H11-V12Z	TACT SWITCH	DOLBY	
R1311	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W		T 351	VQH1008-055	OSC COIL(BIAS)	B. OSC FREQ ADJ	
R1901	QRD161J-3R3	CARBON RESISTOR	SW10V		VR101	QVPA603-502AZM	SEMI-V.RESISTOR	PB OUT LEVEL AJ	
R1902	QRD161J-3R3	CARBON RESISTOR	SW10V		VR102	QVPA603-502AZM	SEMI-V.RESISTOR	REC/PB SENS ADJ	
R1903	QRD161J-3R3	CARBON RESISTOR	SW10V		VR103	QVPA603-104A	SEMI-V.RESISTOR	REC/PB FREQ ADJ	
R1904	QRD161J-471	CARBON RESISTOR	SW10V		VR201	QVPA603-502AZM	SEMI-V.RESISTOR	PB OUT LEVEL AJ	
R1905	QRD161J-182	CARBON RESISTOR	SW10V		VR202	QVPA603-502AZM	SEMI-V.RESISTOR	SENS ADJ	
R1906	QRD161J-472	CARBON RESISTOR	SW10V		VR203	QVPA603-104A	SEMI-V.RESISTOR	REC/PB FREQ ADJ	
R1907	QRD161J-332	CARBON RESISTOR	SW10V		VR271	QVPA603-103M	SEMI-V.RESISTOR	MOT SPEED ADJ	
R1908	QRD161J-222	CARBON RESISTOR	SW10V		Z1901	VMZ0125-001Z	FUSE CLIP	FOR F1901	
R1910	QRZ0077-151X	F.RESISTOR	SW10V		Z1902	VMZ0125-001Z	FUSE CLIP	FOR F1902	
R1912	QRD161J-471	CARBON RESISTOR	SW10V						
R1913	QRD161J-472	CARBON RESISTOR	SW10V						
R1914	QRD161J-472	CARBON RESISTOR	SW10V						
R1915	QRD161J-472	CARBON RESISTOR	SW10V						
R1918	QRZ0077-4R7X	FUSE RESISTOR	US5V						
R1919	QRD161J-472	CARBON RESISTOR	SW10V						
R2701	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W						
R2702	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W						
R2703	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W						
R2704	QRD161J-473	CARBON RESISTOR	MS SW						
R2705	QRD161J-473	CARBON RESISTOR	PLAY SW						
R2706	QRD161J-223	CARBON RESISTOR	LED DRIVER						

# **Tuner & Operation Switch Board**

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 1	NCB21HK-23AY	C CAPACITOR	.022MF 10% 50V	
C 2	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 3	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 4	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 5	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
C 6	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 8	NCB21HJ-150AY	C.CAPACITOR	15PF 5% 50V	
C 9	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 12	NCT21CH-150AY	C CAPACITOR	15PF +50:-10% 1	
C 14	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 15	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 16	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 18	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 19	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 21	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 30	QEK41CM-476	E.CAPACITOR	.47MF 20% 16V	
C 31	NCB21HJ-390AY	C CAPACITOR	39PF 5% 50V	
C 32	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 33	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
C 34	NCB21HJ-150AY	C.CAPACITOR	15PF 5% 50V	
C 35	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 36	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
C 37	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 39	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 40	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 41	QEK41HM-104	E.CAPACITOR	.10MF 20% 50V	
C 42	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
C 43	QEK61HM-352N	E.CAPACITOR	3.5MF 20% 50V	
C 44	NCB21HJ-221AY	C CAPACITOR	220PF 5% 50V	
C 45	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
C 46	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 47	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 49	NCB21HK-183AY	C CAPACITOR	.018MF 10% 50V	
C 50	NCB21HK-183AY	C CAPACITOR	.018MF 10% 50V	
C 51	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C 52	QEK41HK-105	E.CAPACITOR	1.0MF 20% 50V	
C 53	NCB21HK-681AY	C CAPACITOR	680PF 10% 50V	
C 55	NCB21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C 60	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
C 61	NCB21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C 62	NCB21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C 63	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 65	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 66	NCB21HJ-151AY	C CAPACITOR	150PF 5% 50V	
C 67	NCB21HJ-151AY	C CAPACITOR	150PF 5% 50V	
C 68	NCB21HJ-101AY	C CAPACITOR	100PF 5% 50V	
C 69	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	
C 70	NCB21HK-392AY	C CAPACITOR	3900PF 10% 50V	
C 71	QEK61HM-352N	E.CAPACITOR	3.5MF 20% 50V	
C 72	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 91	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 92	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 93	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
CF 1	VCF2MSB-104	CERAMIC FILTER	FM IF	
CF 2	VCF2S3B-102	C FILTER	FM IF	

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CF 3	VCF12Z-115Z	CERAMIC FILTER		
CF 4	CMU2-456B05	CERA LOCK		
CN 1	VMC0289-S10K	CONNECTOR		
CN301	VMC0288-S06	CONNECTOR		
CN308	VMC0289-S06K	CONNECTOR		
CN711	EMV7171-119R	CONNECTOR		
CN712	EMV7171-121R	CONNECTOR		
CN713	VMC0163-R10	CONNECTOR		
CN731	VMC0075-R02	CONNECTOR		
C3101	QFV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
C3102	QCB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
C3103	QTE1V06-106Z	E.CAPACITOR		
C3104	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
C3105	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
C3106	QCFB1HZ-104Y	C.CAPACITOR	FTZ	
C3107	QCFB1HZ-104Y	C.CAPACITOR	FTZ	
C3201	QFV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
C3202	QCB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
C3203	QTE1V06-106Z	E.CAPACITOR		
C3204	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
C3205	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
C3206	QCFB1HZ-104Y	C.CAPACITOR	FTZ	
C3207	QCFB1HZ-104Y	C.CAPACITOR	FTZ	
C3501	QET41CM-227	E.CAPACITOR	220MF 20% 16V	
C3502	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
C3503	QFV71HJ-394ZM	FILM CAPACITOR	.39MF 5% 50V	
C3504	QCC11EM-104V	C.CAPACITOR	FTZ	
C3701	QEK41CM-476	E.CAPACITOR	.47MF 20% 16V	
C3702	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C3703	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
D 1	1SS133	SI DIODE		
D 2	1SS133	SI DIODE		
D 3	1SS133	SI DIODE		
D 4	1SS133	SI DIODE		
D3301	1SS133	SI DIODE		
D3701	SLR-325VCT31	LED		
D3702	SLR-325VCT31	LED		
D3703	1SS133	SI DIODE		
IC 1	TA2057N	IC		
IC 2	LC72136N	IC		
IC301	TA8233H	IC		
IC711	S8X1971-52	IC		
J 1	EMB41YV-502K	ANT TERMINAL	RM. RECIVER	
JS711	VCV7003-001	ROTARY ENCODER	AM/FM ANT	
J3301	EMB90TV-404A	SPK TERMINAL		
J3702	GP1F32T	OPTICAL JACK		
K3501	VQZ0048-009	INDUCTOR	FTZ	
L 1	VQZ0098-102	COIL BLOCK	MW/LW RF/OSC	
L 4	VQP0018-221	INDUCTOR		
L 10	VQZ0069-002	TRAP COIL	114KHZ TRAP	
L 11	VQP0018-2R7	INDUCTOR		
LF401	VQZ0104-003	INDUCTOR	FTZ	
LF201	VQZ0104-003	INDUCTOR	FTZ	
P 1	VMZ0015-011	STYLE PIN		
P 2	VMZ0015-011	STYLE PIN		

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
PL711	QL0011-001	LAMP		
PL712	QL0011-001	LAMP		
Q 1	2SC268(X)	TRANSISTOR		
Q 2	DTA114YKA-X	TRANSISTOR		
Q 3	KTC3199(GL)-T	TRANSISTOR		
Q 4	KTC3199(GL)-T	TRANSISTOR		
Q 6	DTA114YKA-X	TRANSISTOR		
Q 7	2SA1037K(R)	TRANSISTOR		
Q 8	2SA1037K(R)	TRANSISTOR		
Q3101	2SD2144S(VW)	TRANSISTOR		
Q3201	2SD2144S(VW)	TRANSISTOR		
Q3303	DTA114TS	D. TRANSISTOR		
R 1	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 2	NRSA02J-820NY	MG RESISTOR	82 5% 1/10W	
R 3	NRSA02J-560NY	MG RESISTOR	56 5% 1/10W	
R 10	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
R 12	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 13	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 15	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 16	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 20	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
R 21	NRSA02J-224NY	MG RESISTOR	220K 5% 1/10W	
R 22	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
R 23	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
R 24	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 25	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 26	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
R 27	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 29	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 30	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 31	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 34	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
R 35	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
R 36	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 37	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 38	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
R 39	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
R 42	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 43	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 44	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 45	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 46	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 48	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 52	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 54	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 55	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
R 56	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 57	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 60	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 61	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 65	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 66	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 68	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 69	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 74	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 75	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R3101	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3102	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3103	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3104	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3105	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3106	QRD161J-4R7	CARBON RESISTOR	FTZ	
R3107	QRD161J-331	CARBON RESISTOR	FTZ	
R3201	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3202	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3203	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3204	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3205	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3206	QRD161J-4R7	CARBON RESISTOR	FTZ	
R3207	QRD161J-331	CARBON RESISTOR	FTZ	
R3301	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R3701	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3702	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3703	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R3704	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R3705	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3706	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R3707	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R3708	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R3709	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R3710	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3711	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
R3712	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
R3713	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3714	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3721	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3722	QRD161J-913	CARBON RESISTOR	91K 5% 1/6W	
S3701	QSQ4H11-V12Z	TACT SWITCH		
S3702	QSQ4H11-V12Z	TACT SWITCH		
S3703	QSQ4H11-V12Z	TACT SWITCH		
S3704	QSQ4H11-V12Z	TACT SWITCH		
S3705	QSQ4H11-V12Z	TACT SWITCH		
S3706	QSQ4H11-V12Z	TACT SWITCH		
S3707	QSQ4H11-V12Z	TACT SWITCH		
S3708	QSQ4H11-V12Z	TACT SWITCH		
S3709	QSQ4H11-V12Z	TACT SWITCH		
S3721	VSH1153-002	SWITCH		
S3722	VSH1153-002	SWITCH		
T 1	VQT7A21-413	IFT		
TU 1	VAF2S13-001	FRONT END	FM TU	
X 1	VCS5044-001	CRYSTAL		

# System CPU Board

BLOCK NO. 03

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN302	VMC028B-P06	CONNECTOR		
	CN303	VMC0163-R15	CONNECTOR		
	CN304	VMC0163-P10	CONNECTOR		
	CN305	VMC0289-P10	CONNECTOR		
	CN306	VMC0163-P08	CONNECTOR		
	CN307	VMC0289-P06	CONNECTOR		
	CN309	EMV7141-019M	F. WIRE SKT		
	CN701	EMV7171-119	CONNECTOR		
	CN702	EMV7171-121	CONNECTOR		
	CN703	VMC0163-P10	CONNECTOR		
	CN704	VMC0163-R11	CONNECTOR		
	CN705	VMC0075-004	CONNECTOR		
	CN706	VMC0163-R08	CONNECTOR		
	CN707	VMC0163-R15	CONNECTOR		
	C7001	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
	C7002	QCB81HK-101Y	C. CAPACITOR	100PF 10% 50V	
	C7003	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
	C7004	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
	C7005	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7006	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7007	QCB81HK-102Y	C. CAPACITOR	1000PF 10% 50V	
	C7008	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
	C7009	QCS11HJ-470	C. CAPACITOR	47PF 5% 50V	
	C7010	QCS11HJ-330	C. CAPACITOR	33PF 5% 50V	
	C7011	QCS11HJ-330	C. CAPACITOR	33PF 5% 50V	
	C7012	QCS11HJ-470	C. CAPACITOR	47PF 5% 50V	
	C7013	QCS11HJ-220	C. CAPACITOR	22PF 5% 50V	
	C7014	QCS11HJ-220	C. CAPACITOR	22PF 5% 50V	
	C7015	QCB81HK-102Y	C. CAPACITOR	1000PF 10% 50V	
	C7016	QCB81HK-102Y	C. CAPACITOR	1000PF 10% 50V	
	C7017	QCB81HK-105	E. CAPACITOR	1.0MF 20% 50V	
	C7018	QCB81HK-106	E. CAPACITOR	1.0MF 20% 16V	
	C7019	QCB81HK-228Z	E. CAPACITOR	2200MF 20% 6.3V	
	C7020	QCB81HK-107	E. CAPACITOR	100MF 20% 16V	
	C7021	QCB81HK-106	E. CAPACITOR	1.0MF 20% 16V	
	C7022	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7023	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7024	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7025	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7101	QCB81HK-122Y	C. CAPACITOR	1200PF 20% 16V	
	C7102	QCB81HK-332Y	C. CAPACITOR	3300PF 20% 16V	
	C7103	QTE1H06-475Z	E. CAPACITOR	22PF 5% 50V	
	C7104	QCS11HJ-220	C. CAPACITOR	FTZ	
	C7105	QCS11HJ-330	C. CAPACITOR		
	C7106	QTE1H06-475Z	E. CAPACITOR		
	C7107	QFV71HJ-334ZM	FILM CAPACITOR	.33MF 5% 50V	
	C7108	QFV41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
	C7109	QFV41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
	C7110	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7111	QTE1V06-106Z	E. CAPACITOR		
	C7112	QCB81HK-335Z	E. CAPACITOR	3.3MF 20% 50V	
	C7113	QCB81HK-151Y	E. CAPACITOR	150PF 10% 50V	
	C7114	QCB81HK-227Z	E. CAPACITOR	220MF 20% 10V	
	C7115	QCB81HK-103Y	C. CAPACITOR	FTZ	
	C7116	QFV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	

BLOCK NO. 03

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C7117	QCS11HJ-680	C. CAPACITOR	68PF 5% 50V	
	C7118	QCB81HK-101Y	C. CAPACITOR	FTZ	
	C7119	QTE1C06-226Z	E. CAP. SILMIC		
	C7120	QCB81HK-151Y	C. CAPACITOR	FTZ	
	C7121	QFV81HJ-323	FILM CAPACITOR	.022MF 5% 50V	
	C7122	QFV81HJ-105	E. CAPACITOR	1.0MF 20% 50V	
	C7123	QFV81HJ-154	FILM CAPACITOR	.15MF 5% 50V	
	C7124	QTE1H15-475Z	E. CAPACITOR		
	C7125	QFN41HJ-222	M. CAPACITOR	2200PF 5% 50V	
	C7126	QCB81HK-151Y	C. CAPACITOR	FTZ	
	C7201	QCB81HK-122Y	C. CAPACITOR	1200PF 20% 16V	
	C7202	QCB81HK-332Y	C. CAPACITOR	3300PF 20% 16V	
	C7203	QTE1H06-475Z	E. CAPACITOR		
	C7204	QCS11HJ-220	C. CAPACITOR	22PF 5% 50V	
	C7205	QCS11HJ-330	C. CAPACITOR	FTZ	
	C7206	QTE1H06-475Z	E. CAPACITOR		
	C7207	QFV71HJ-334ZM	FILM CAPACITOR	.33MF 5% 50V	
	C7208	QFV41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
	C7209	QFV41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
	C7210	QCB81HK-103Y	C. CAPACITOR	.010MF 20% 16V	
	C7211	QTE1V06-106Z	E. CAPACITOR		
	C7212	QCB81HK-335Z	E. CAPACITOR	3.3MF 20% 50V	
	C7213	QCB81HK-151Y	E. CAPACITOR	150PF 10% 50V	
	C7214	QCB81HK-227Z	E. CAPACITOR	220MF 20% 10V	
	C7215	QCB81HK-103Y	C. CAPACITOR	FTZ	
	C7216	QFV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
	C7217	QCS11HJ-680	C. CAPACITOR	68PF 5% 50V	
	C7218	QCB81HK-101Y	C. CAPACITOR	FTZ	
	C7219	QTE1C06-226Z	E. CAP. SILMIC		
	C7220	QCB81HK-151Y	C. CAPACITOR	FTZ	
	C7221	QFV81HJ-223	FILM CAPACITOR	.022MF 5% 50V	
	C7222	QCB81HK-105	E. CAPACITOR	1.0MF 20% 50V	
	C7223	QFV81HJ-154	FILM CAPACITOR	.15MF 5% 50V	
	C7224	QTE1H15-475Z	E. CAPACITOR		
	C7225	QFN41HJ-222	M. CAPACITOR	2200PF 5% 50V	
	C7226	QCB81HK-151Y	C. CAPACITOR	FTZ	
	C7301	QCB81HK-226	E. CAPACITOR	22MF 20% 16V	
	C7302	QCB81HK-226	E. CAPACITOR	22MF 20% 16V	
	C7303	QCB81HK-107ZM	E. CAPACITOR	100MF 20% 10V	
	C7304	QCB81HK-224	E. CAPACITOR	.22MF 20% 50V	
	C7305	QCB81HK-102Y	C. CAPACITOR	1000PF 10% 50V	
	C7306	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
	C7307	QCB81HK-151Y	C. CAPACITOR	150PF 10% 50V	
	C7308	QCB81HK-107ZM	E. CAPACITOR	100MF 20% 10V	
	C7309	QCB81HK-226	E. CAPACITOR	22MF 20% 16V	
	C7310	QCB81HK-475Z	E. CAPACITOR	4.7MF 20% 50V	
	C7311	QCB81HK-475Z	E. CAPACITOR	4.7MF 20% 50V	
	C7312	QCB81HK-106	E. CAPACITOR	10MF 20% 16V	
	C7313	QCB81HK-107ZM	E. CAPACITOR	100MF 20% 10V	
	C7314	QCB81HK-476	E. CAPACITOR	47MF 20% 16V	
	C7315	QCB81HK-105	E. CAPACITOR	1.0MF 20% 50V	
	C7316	QCB81HK-226	E. CAPACITOR	22MF 20% 16V	
	C7317	QCB81HK-223V	C. CAPACITOR	FTZ	
	C7318	QCB81HK-223V	C. CAPACITOR	FTZ	
	C7319	QCB81HK-226	E. CAPACITOR	22MF 20% 16V	

BLOCK NO. 03						BLOCK NO. 03					
A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C7320	QFV41HJ-224	FILM CAPACITOR	-22MF 5% 50V			K7303	VQZ0048-009	INDUCTOR		
	C7321	QFV41HJ-1042M	FILM CAPACITOR	-10MF 5% 50V			K7304	VQZ0048-009	INDUCTOR		
	C7324	QEK41CM-226	E-CAPACITOR	22MF 20% 16V			LF102	EF0101-010	FILTER		
	C7327	QCB81HK-471Y	C-CAPACITOR	470PF 10% 50V			LF202	EF0101-010	FILTER		
	C7901	QETM1EM-688	E-CAPACITOR	6800MF 20% 25V			L7001	VGP0018-470	INDUCTOR		
	C7902	QCB81HK-221Y	C-CAPACITOR	220PF 10% 50V			L7002	VGP0018-470	INDUCTOR		
	C7903	QCC11EM-103V	C-CAPACITOR	-010MF 20% 25V			L7003	VGP0018-470	INDUCTOR		
	C7904	QEK41CM-226	E-CAPACITOR	22MF 20% 16V			L7004	VGP0018-221	INDUCTOR		
	C7905	QCC11EM-104V	C-CAPACITOR	-10MF 20% 25V			L7005	VGP0028-221Z	INDUCTOR		
	C7906	QEK41CM-106	E-CAPACITOR	10MF 20% 16V			L7101	VGP0018-470	INDUCTOR	FTZ	
	C7907	QEK61HM-475ZN	E-CAPACITOR	4.7MF 20% 50V			L7102	VGP0018-470	INDUCTOR	FTZ	
	C7908	QCB81HK-101Y	C-CAPACITOR	100PF 10% 50V			L7103	VGP0018-470	INDUCTOR	FTZ	
	C7909	QET41EM-107	E-CAPACITOR	100MF 20% 25V			L7201	VGP0018-470	INDUCTOR	FTZ	
	C7910	QEK61HM-475ZN	E-CAPACITOR	4.7MF 20% 50V			L7202	VGP0018-470	INDUCTOR	FTZ	
	C7911	QEK61AM-1072M	E-CAPACITOR	100MF 20% 10V			L7203	VGP0018-470	INDUCTOR	FTZ	
	C7912	QET41EM-107	E-CAPACITOR	100MF 20% 25V			L7301	VGP0018-101	INDUCTOR	FTZ	
	D7005	1SS133	SI DIODE				L7302	VGP0018-470	INDUCTOR	FTZ	
	D7006	1SS133	SI DIODE				L7901	Q8L28AK-101	CHOK COIL		
	D7007	1SS133	SI DIODE				Q7001	2SC2668(O)	TRANSISTOR		
	D7008	MT24.7JB	ZENER DIODE				Q7002	2SC2668(O)	TRANSISTOR		
	D7009	1SS133	SI DIODE				Q7003	DTA114TS	D-TRANSISTOR		
	D7011	1SS133	SI DIODE				Q7004	2SC2785	TRANSISTOR		
	D7301	RB721Q	DIODE				Q7005	DTC114TSA-T	D-TRANSISTOR		
	D7302	RB721Q	DIODE				Q7006	DTC114TSA-T	D-TRANSISTOR		
	D7305	1SS133	SI DIODE				Q7007	2SC2785	TRANSISTOR		
	D7306	1SS133	SI DIODE				Q7008	DTC114TSA-T	D-TRANSISTOR		
	D7307	1SS133	SI DIODE				Q7009	DTC114ESA-T	D-TRANSISTOR		
	D7309	SLR-325MCT31	LED				Q7010	DTC114TSA-T	D-TRANSISTOR		
	D7901	1SS133	SI DIODE				Q7101	2SC2785	TRANSISTOR		
	D7902	MT210JAT-77	ZENER DIODE				Q7102	2SD2144S(VW)	TRANSISTOR		
	D7903	MT28.2JB	ZENER DIODE				Q7104	2SK105(E,F,H)	TRANSISTOR		
	D7904	MT27.5JA	Z-DIODE				Q7105	2SC2001(L,K)	TRANSISTOR		
	D7905	RB100A	DIODE				Q7106	2SC2001(L,K)	TRANSISTOR		
	D7906	MT27.5JA	Z-DIODE				Q7107	2SD2144S(VW)	TRANSISTOR		
	D7907	1SS133	SI DIODE				Q7201	2SC2785	TRANSISTOR		
	D7908	1SS133	SI DIODE				Q7202	2SD2144S(VW)	TRANSISTOR		
	D7909	MT23.9JB	ZENER DIODE				Q7204	2SK105(E,F,H)	TRANSISTOR		
	D7910	1SS133	SI DIODE				Q7205	2SC2001(L,K)	TRANSISTOR		
	D7911	1SS133	SI DIODE				Q7206	2SC2001(L,K)	TRANSISTOR		
	D7912	1SS133	SI DIODE				Q7207	2SD2144S(VW)	TRANSISTOR		
	D7913	1SS133	SI DIODE				Q7301	DTC144ESA-T	TRANSISTOR		
	IC302	BA15218N	IC				Q7305	2SA1175	TRANSISTOR		
	IC303	BH3854AS	IC				Q7306	DTC144TSA-T	D-TRANSISTOR		
	IC304	BA15218N	IC				Q7901	2SB1565(E,F)	TRANSISTOR		
	IC305	BA15218N	IC				Q7902	2SA1175	TRANSISTOR		
	IC306	VC4580L	IC				Q7903	DTC144TSA-T	D-TRANSISTOR		
	IC701	MN101C03AJB	IC				Q7904	DTA144TSTP	TRANSISTOR		
	IC702	TAB409S	IC				Q7905	2SC2785	TRANSISTOR		
	IC901	UPC78L06J	IC				Q7906	2SC2785	TRANSISTOR		
	J7301	QNS0014-001	JACK				Q7907	2SA1359(OY)	TRANSISTOR		
	K7001	VQZ0048-009	INDUCTOR				Q7908	2SC2785	TRANSISTOR		
	K7002	VQZ0048-009	INDUCTOR				Q7909	2SA934(Q,R)	TRANSISTOR		
	K7004	VQZ0048-009	INDUCTOR				Q7910	2SC2785	TRANSISTOR		
	K7301	VQZ0048-009	INDUCTOR	FTZ			Q7911	DTC144TSA-T	D-TRANSISTOR		
	K7302	VQZ0048-009	INDUCTOR				Q7912	2SA1175	TRANSISTOR		

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R7057	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7058	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R7059	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7060	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7061	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R7062	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7063	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7064	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
R7065	QRD161J-100	CARBON RESISTOR	10 5% 1/6W	
R7066	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R7067	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R7068	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R7069	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R7071	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7072	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7073	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7074	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7075	QRD161J-100	CARBON RESISTOR	10 5% 1/6W	
R7101	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7102	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R7103	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
R7104	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
R7106	QRD161J-753	CARBON RESISTOR	75K 5% 1/6W	
R7107	QRD161J-102	CARBON RESISTOR	F12	
R7109	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R7110	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R7111	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7112	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7113	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7114	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R7115	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7116	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R7117	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7118	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R7119	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7120	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7121	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R7122	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
R7123	QRD161J-911	CARBON RESISTOR	910 5% 1/6W	
R7124	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
R7125	QRD161J-363	CARBON RESISTOR	36K 5% 1/6W	
R7126	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7127	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R7128	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7129	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
R7130	QRD161J-104	CARBON RESISTOR	4.7M 5% 1/6W	
R7131	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7133	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R7134	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R7135	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7136	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7137	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7201	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7202	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R7203	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q7913	25C2785	TRANSISTOR		
Q7914	DTA1431STP	TRANSISTOR		
Q7915	25A1175	TRANSISTOR		
Q7916	DTA114TS	D-T TRANSISTOR		
R7001	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R7002	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7003	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7004	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7005	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7006	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7007	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7008	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7009	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7010	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7011	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7012	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7013	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7014	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7015	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7016	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7017	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7018	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R7019	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7020	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7021	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7022	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7023	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7024	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7025	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7026	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7027	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7028	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7029	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7030	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7031	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7032	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7033	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7034	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7035	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7036	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7037	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7038	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7039	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7040	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7041	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7042	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7043	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7044	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7045	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7046	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R7047	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R7053	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R7054	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R7055	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R7056	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	

BLOCK NO. 03					SUFFIX
A	REF.	PARTS NO.	PARTS NAME	REMARKS	
	R7328	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7901	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R7902	QRD161J-3R3	CARBON RESISTOR	3.3 5% 1/6W	
	R7903	QRD161J-3R3	CARBON RESISTOR	3.3 5% 1/6W	
	R7904	QRD161J-3R3	CARBON RESISTOR	3.3 5% 1/6W	
	R7905	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R7906	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
	R7907	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R7908	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R7909	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7910	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7911	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7912	QRD161J-472	CARBON RESISTOR	47K 5% 1/6W	
	R7913	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R7914	QRD161J-472	CARBON RESISTOR	47K 5% 1/6W	
	R7916	QRD161J-472	CARBON RESISTOR	47K 5% 1/6W	
	R7917	QRD161J-472	CARBON RESISTOR	47K 5% 1/6W	
	R7918	QRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W	
	R7919	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R7920	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R7921	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R7922	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R7923	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R7924	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R7925	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R7926	QRD161J-390	CARBON RESISTOR	39 5% 1/6W	
	R7927	QRD161J-472	CARBON RESISTOR	47K 5% 1/6W	
	R7928	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R7929	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7930	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R7931	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R7932	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R7933	QRD161J-472	CARBON RESISTOR	47K 5% 1/6W	
	TH901	ERT-D22HL153T	THERMISTOR		
	X7001	VCX5000-002	CRYSTAL		
	X7002	CSAB.00MTZ226-T	CERA LOCK		

BLOCK NO. 03					SUFFIX
REF.	PARTS NO.	PARTS NAME	REMARKS		
R7204	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W		
R7206	QRD161J-753	CARBON RESISTOR	75K 5% 1/6W		
R7207	QRD161J-102	CARBON RESISTOR	10K 5% 1/6W		
R7209	QRD161J-562	CARBON RESISTOR	56K 5% 1/6W		
R7210	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W		
R7211	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W		
R7212	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W		
R7213	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		
R7214	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W		
R7215	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R7216	QRD161J-220	CARBON RESISTOR	22 5% 1/6W		
R7217	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		
R7218	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W		
R7219	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R7220	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W		
R7221	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W		
R7222	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W		
R7223	QRD161J-911	CARBON RESISTOR	910 5% 1/6W		
R7224	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W		
R7225	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W		
R7226	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W		
R7227	QRD161J-471	CARBON RESISTOR	470 5% 1/6W		
R7228	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		
R7229	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W		
R7230	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W		
R7231	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W		
R7233	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W		
R7234	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W		
R7235	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R7236	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R7237	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R7301	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R7302	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W		
R7303	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W		
R7304	QRD161J-121	CARBON RESISTOR	120 5% 1/6W		
R7305	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R7306	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W		
R7307	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		
R7308	QRD161J-121	CARBON RESISTOR	120 5% 1/6W		
R7309	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W		
R7310	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W		
R7311	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W		
R7312	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W		
R7313	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W		
R7314	QRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W		
R7318	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W		
R7319	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W		
R7320	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W		
R7321	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		
R7322	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		
R7323	QRD161J-121	CARBON RESISTOR	120 5% 1/6W		
R7324	QRD161J-121	CARBON RESISTOR	120 5% 1/6W		
R7325	QRD161J-121	CARBON RESISTOR	120 5% 1/6W		
R7326	QRD161J-121	CARBON RESISTOR	120 5% 1/6W		
R7327	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W		

## CD Servo Control Board

BLOCK NO. 04					BLOCK NO. 04				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 604	QEK51AM-107	E. CAPACITOR	100MF 20% 10V		R 603	QRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W	
C 605	QET41EM-106	E. CAPACITOR	10MF 20% 25V		R 605	QRD167J-134	C. RESISTOR	130K 5% 1/6W	
C 606	QCB81HK-102Y	C. CAPACITOR	1000PF 10% 50V		R 606	QRD161J-913	CARBON RESISTOR	91K 5% 1/6W	
C 607	QCB81HK-102Y	C. CAPACITOR	1000PF 10% 50V		R 607	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
C 608	QET41EM-105	E. CAPACITOR	1.0MF 20% 50V		R 609	QRD161J-114	C. RESISTOR	110K 5% 1/6W	
C 609	QCB81HK-101Y	C. CAPACITOR	100PF 10% 50V		R 610	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
C 610	QFLC1HJ-2732M	M. CAPACITOR	.027MF 5% 50V		R 612	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
C 611	QCBX1CM-222Y	C. CAPACITOR	2200PF 20% 16V		R 613	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
C 612	QCBX1CM-103Y	C. CAPACITOR	.010MF 20% 16V		R 614	QRD161J-100	CARBON RESISTOR	10 5% 1/6W	
C 613	QCB81HK-331Y	C. CAPACITOR	330PF 10% 50V		R 615	QRD161J-120	CARBON RESISTOR	12 5% 1/6W	
C 614	QFLC1HJ-1042M	M. CAPACITOR	.10MF 5% 50V		R 616	QRD161J-910Y	CARBON RESISTOR	91 5% 1/6W	
C 615	QCH81E2-223	C. CAPACITOR	.022MF +80% -20%		R 621	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
C 616	QCH81E2-223	C. CAPACITOR	.022MF +80% -20%		R 622	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
C 617	QCH81E2-223	C. CAPACITOR	.022MF +80% -20%		R 623	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
C 618	QCBX1CM-222Y	C. CAPACITOR	2200PF 20% 16V		R 631	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
C 619	QCB81HK-271Y	C. CAPACITOR	270PF 10% 50V		R 632	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
C 620	QCS11HJ-470	C. CAPACITOR	47PF 5% 50V		R 633	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
C 621	QCB81HK-821Y	C. CAPACITOR	820PF 10% 50V		R 641	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
C 622	QET41AM-476	E. CAPACITOR	47MF 20% 10V		R 642	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
C 623	QFLC1HJ-1042M	M. CAPACITOR	.10MF 5% 50V		R 643	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
C 628	QCC11EM-473V	C. CAPACITOR	.047MF 20% 25V		R 644	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
C 629	QET41AM-107	E. CAPACITOR	100MF 20% 10V		R 645	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
C 631	QET41AM-477	E. CAPACITOR	470MF 20% 10V		R 646	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
C 632	QEK51AM-107	E. CAPACITOR	100MF 20% 10V		R 647	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
C 651	QCS11HJ-120	C. CAPACITOR	12PF 5% 50V		R 651	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
C 652	QCS11HJ-150	C. CAPACITOR	15PF 5% 50V		R 652	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
C 653	QCH81E2-223	C. CAPACITOR	.022MF +80% -20%		R 653	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
C 655	QCC11EM-473V	C. CAPACITOR	.047MF 20% 25V		R 654	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
C 661	QCB81HK-471Y	C. CAPACITOR	470PF 10% 50V		R 655	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
C 662	QCH81E2-223	C. CAPACITOR	.022MF +80% -20%		R 659	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
C 663	QFLC1HJ-2232M	M. CAPACITOR	.022MF 5% 50V		R 661	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
C 664	QCH81E2-223	C. CAPACITOR	.022MF +80% -20%		R 663	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
C 665	QFV71HJ-3342M	FILM CAPACITOR	.33MF 5% 50V		R 664	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
C 671	QCBX1CM-222Y	C. CAPACITOR	2200PF 20% 16V		R 666	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
C 672	QCBX1CM-222Y	C. CAPACITOR	2200PF 20% 16V		R 671	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
C 673	QET41AM-227	E. CAPACITOR	220MF 20% 10V		R 672	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
C 674	QCH81E2-223	C. CAPACITOR	.022MF +80% -20%		X 651	VCK5016-934V	CRYSTAL	16.9344MHZ	
C 675	QCB81HK-102Y	C. CAPACITOR	AG-DG						
C 676	QCB81HK-102Y	C. CAPACITOR	AG-DG						
C 691	QCB81HK-151Y	C. CAPACITOR	DENGEN NOISE						
C 692	QCB81HK-151Y	C. CAPACITOR	DENGEN NOISE						
C 693	QCB81HK-151Y	C. CAPACITOR	DENGEN NOISE						
C 694	QCB81HK-151Y	C. CAPACITOR	DENGEN NOISE						
CN601	GGF1008F1-15	15PIN CONNECTOR	TO RF						
CN602	EMV5109-006A	6P PLUG ASSY	TO MOTOR						
CN603	VMC0163-R07	CONNECTOR	TO AUDIO						
CN604	VMC0163-R11	CONNECTOR	TO MICRON						
CN605	VMC0041-003	CONNECTOR	TO DIGITAL OUT						
D 661	1SS133	SI DIODE							
IC601	AN8806SB	IC	RF AMP						
IC602	BA6897FP	IC	DRIVER						
IC603	MN35510	IC	1CHIP PROCESSOR						
Q 601	2SA952(L,K)	TRANSISTOR							
Q 631	2SA952(L,K)	TRANSISTOR							
R 601	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W						

## ■ Cassette Mechanism Board

[illegible]



## 14. Packing

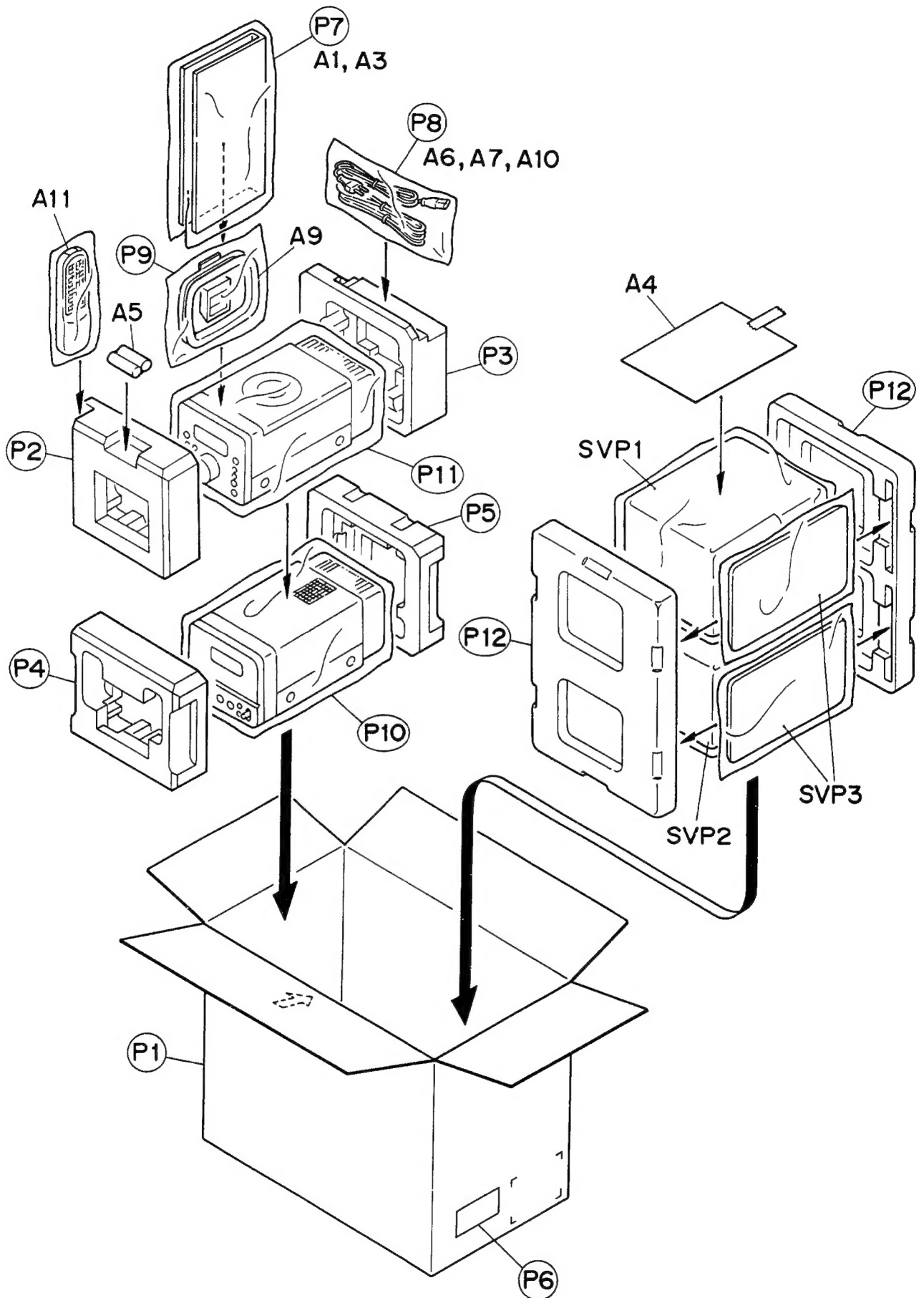


Fig. 14-1

# Packing Parts List

BLOCK NO. M5MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
P 1	VPC9306-E001	CARTON		1		
P 2	VPH1708-201	CUSHION(CD/F)		1		
P 3	VPH1708-202	CUSHION(CD/R)		1		
P 4	VPH1708-204	CUSHION(DECK/F)		1		
P 5	VPH1708-203	CUSHION(DECK/R)		1		
P 6	-----	CARTON LABEL		1		
P 7	VPE3005-007	POLY BAG	FOR INST BOOK	1		
P 8	QPGA015-03503	POLY BAG	FOR POWER CORD	1		
P 9	VPE3005-042	POLY BAG	AM LOOP ANT	1		
P 10	VPE3026-007	POLY BAG	DICK SET	1		
P 11	VPE3026-007	POLY BAG	TU/CD SET	1		
P 12	VPH3232-001	SPEAKER CUSHION		2		

# Accessories

BLOCK NO. M6MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A 1	VNN9306-271E	INSTRUCTIONS		1	G	
	VNN9306-251E	INSTRUCTIONS		1	E	
	VNN9306-261E	INSTRUCTIONS		1		
A 3	BT-54006-1	WARRANTY CARD		1	B	
A 4	VND5138-001	CAUTION SHEET		1		
A 5	R6S-2S	BATTERY		2		
A 6	QMP39F0-183	POWER CORD		1		
A 7	EW503-001	ANT.WIRE		1		
A 9	EQB4001-015	AM LOOP ANT		1		
A 10	VMP0093-002	SPEAKER CORD		2		
A 11	VGR0059-101	REMOCON UNIT	RM-RXUD88	1		
SVP 1	UXD88K-SPBOX-L	SPEAKER BOX(L)	SERVICE PARTS	1	E	
	UXD88HK-SPBOX-L	SPEAKER BOX(L)	SERVICE PARTS	1	EN,G	
SVP 2	UXD88HK-SPBOX-R	SPEAKER BOX(R)	SERVICE PARTS	1	EN,G	
	UXD88K-SPBOX-R	SPEAKER BOX(R)	SERVICE PARTS	1	E	
SVP 3	VYTB432-001	SARAN NET ASSY	SERVICE PARTS	2		